The Journal

OF THE

Jamaica Agricultural Society.

The more people do the more they can do; he who does nothing renders himself incapable of doing anything; while we are executing one work we are preparing ourselves for undertaking another.

VOL. XVII. DECEMBER, 1913. No. 12.

BOARD OF MANAGEMENT.

The usual monthly meeting of the Board of Management of the Jamaica Agricultural Society was held at the office of the Society, 11 North Parade, Kingston, on Thursday the 20th November, 1913, at 4.40 a.m. Present: His Excellency Sir William H. Manning, K.C.M.G., C.B., presiding: Hons. L. J. Bertram, Dugald Campbell, The Director of Agriculture, Geo. McGrath, R. P. Simmonds, S. S. Stedman, and J. R. Williams; Messrs. R. Craig, A. W. Douet, A, C. L. Martin, Conrad Watson, Rev. W. T. Graham and the Secretary John Barclay.

Apologies for absence were intimated from Sir John Pringle, His Lordship Bishop Collins, and Mr. E. W. Muirhead.

The minutes of the previous meeting having been published were read aud confirmed.

Matters arising out of the minutes ;—

(*a*) *Shows.*

According to previous notice given, Mr. Martin moved the following resolution :—

To ask the Secretary to lay on the table at the next meeting a list of the different Shows to which grants have been made for year ending 31st March, 1914. and if all these Shows have strictly complied with the Rules re Grants to Shows and on what dates were these grants made

The Secretary submitted the list asked for.

Mr, Martin asked whether the rules had always been strictly adhered to, especially with regard to the publication of the Prize Lists at least three months before the Show.

The Secretary said that the only Show of which notice had been given which had not fulfilled the rule strictly in this respect was Porus Show for which he was partly responsible and he explained the circumstances.

It was decided to warn all Show Committees receiving grants, that the rule in this respect would require to be strictly conformed with.

(b) *Crown Lands.*

Mr. Stedman who had moved at the previous meeting a resolution relative to Crown Lands, said that since that meeting His Excellency the Governor had been travelling in Portland and St. Thomas and had expressed himself as impressed with the necessity of dealing with the matter of making the Crown Lands available for settlement, and so he did not think that he needed to bring forward what he had intended to do; he asked therefore to be allowed to withdraw the motion standing in his name. Agreed.

(c) *Produce Protection Law* :—

The Secretary submitted the Report of the meeting of the Special Committee held the previous day.

"The Committee appointed by the Board of Management to advise as to what amendments in the Produce Protection Law should be recommended to the Government, met on the 19th November, at 11.30 a,m. Present: Hons. J. R. Williams (in the chair), R. P. Simmonds, S. S. Stedman, Messrs, R. Craig, A. W. Douet,. and A. C, L' Martin. The following gentlemen, joined the committee by invitation and were present: Messrs' R. S. Gamble, Arthur George, L. A. Isaacs, E. B. Hopkins, (Atlantic Fruit Co,), J. B. Cox (S. S. Smith & Co.,) J. W. Hill, (Rowntree and Co., Ltd.), C. H. C. Goffe (Goffe Bros.), G. V. Brandon, (Wessels Bros.), and Rev. H. B. Walcott.

"The Committee recommends as follows:

"(1) That the resolution adopted at the Conference held on the 15th October, in favour of the establishment of buying centres for Agricultural produce, should not be recommended to the Government.

"(2) That section 2 in Law 51 of 1903, should be amended so that premises be defined as any substantial house, shop, depot, wharf or building, specially set apart for the purpose and approved by an officer appointed for the purpose, in or at which Agricultural Produce is purchased, or sold, such definitions not to apply to bananas bought at Railway stations or shipping ports, or dyewoods, or other economic woods, for which an enclosed place may be sufficient.

"(3) That in addition to the requirements specified in section 6, sub-sections (a), (b). (c), (d), an applicant for a license shall further satisfy the Inspector or other chief officer of Constabulary of the parish that he is competent himself to keep the books required (see section 12) in English.

"(4) That no license to deal in the produce specified in Schedule 2, class 1, shall apply to produce uncured or wet or in the skin, pod or husk, unless the Inspector or other chief officer of Constabulary is satisfied by the report of an Agricultural Instructor, or otherwise, that his applicant has suitable arrangements made for the curing of the same.

"(5) That no license to deal in the produce specified in Schedule 5 shall be granted unless the buildings to be used are specified and described and the dimensions given and the Inspector or other chief officer of Constabulary is satisfied that the applicant has suitable arrangements made for the storage and packing of the same.

"(6) That conviction for prædial larceny or the knowing employment of any person convicted of "Prædial Larceny" be added to the disqualifications enumerated in Section 7 of Law 31 of 1903.

"(7) That a copy of the Produce Protection Law or Laws be required to be kept for reference in all licensed premises (Section 11 of Law 31 1903.)

"(8) That the requirements as to the book to be kept by produce dealers (Section 12 of Law 31 of 1903) should be added to and amended. The book should be required to be kept in English and should show the number of the current license and the dates of purchases. District constables and authorised persons should be added to the persons entitled to inspect these books and the special authority of the Inspector of Police or Chief Officer of Constabulary or of a Justice of the Peace should not be required. And in the books should be recorded any visits of inspectors and the dates.

"(9.) That the age of children from whom produce may be bought be raised from 12 to 15 years.

"(10.) That Sections 18 and 19 of Law 31 of 1903 be amended to bring them into accordance with Law 9 of 1907 by striking out the words 'or servant,' in lines 1—2 and (a) and 16 in line 3 of Section 18 and the words 'or servant for whom a license is required' in line 3 of Section 19.

"(11.) That some section should be introduced limiting the liability of produce dealers for violation of the Law committed by their agents

"(12.) That in Section 26 of Law 31 of 1903 in line 6 after the words 'book or record,' the word 'or such other book or record as may be approved should be inserted.

"(13.) That in Section 28 of Law 31 of 1903, line 2, after the words 'duly licensed' the words 'or employed by a licensed person' should be inserted.

"(14.) That in Law 9 of 1906, provision should be made for inspection by an officer appointed for the purpose, of produce specified in Schedule V. packed for export and for confiscation of the produce, and fine of the shipper if it be found unfit for human consumption.

"(15.) That the Produce Protection Laws should be amended as above, and consolidated as early as possible,

"(16.) That the Government be urged to secure proper enforcement of the Produce Protection Laws by the Police or by the employment of special officers for the purpose, out of the funds derived from the Produce Licenses."

(Sgd.) J. R. WILLIAMS,
Chairman.

Mr. Simmonds said he had discovered since the meeting that there was an omission in the Report. He thought that in the buying of produce an exception should be made in the case of bananas which should be permitted to be bought at shipping ports and railway stations without the substantial buildings referred to, being necessary.

This exception was agreed to be added.

Mr. Stedman said there were other items in the Report needing amendment; the most important subject he thought, and the one which had probably had most to do with the bringing up of the whole matter, was the cocoa industry which had not been fully dealt with. He did not think the Report could be dealt with by hearing it read, and asked that it be now referred back to a smaller Committee for amendment.

Mr. Simmonds objected on the ground that he thought it would be an insult to the Committee that had made the Report to refer it to another Committee.

Mr. Stedman held that the object of having a large Committee was to receive ideas and opinions on broad and general lines and having received these, a smaller Committee could go into each matter more minutely, and he moved accordingly.

Mr. Craig seconded and said he was in favour of the Report being sent back to a smaller Committee. He was not in accord with many things in the Report, and personally he did not desire to sit on the Committee.

Mr. Williams moved that the matter should now be dealt with by the Board itself; Mr. Martin seconded, and on being put to the vote, 5 members voted that the Report should be dealt with by the Board and 4 that it should first go to a Committee of the Board.

As there were only two copies of the Report available, it was resolved to defer the matter until the next meeting, and meantime the Secretary was instructed to send each member of the Board a copy of the Report for consideration.

(*d*) *Cotton Seed, Mahoe & Mahogany Bark* :—

The following letter from the C. S. O. was submitted :—

No. $\frac{13718}{18510}$ 4th November, 1913.

"I am directed by the Governor to acknowledge the receipt of your letter No. 5992 dated the 16th ult., and to inform you that the question of the addition of cotton seed to schedule A of Law 4 of 1909, "A Law in aid of the Laws relating to Prædial Larceny," will be considered in Privy Council.

2. "In regard to your recommendations that Mahoe, Mahogany and Cedar bark should be added to schedule A of the same law, I am to inform you that the Governor is advised that Cedar, Mahogany and Mahoe already appear in schedule A of Law 4 of 1909, and unless the Courts decide, that the bark of and shingles from those trees. are not within the meaning of the schedule. His Excellency does not propose to specifically include such bark and shingles in the schedule."

(Sgd.) P. C. CORK,
Colonial Secretary.

The Secretary said that he knew of cases where it had been held that the bark of Mahoe trees did not come under the Schedule referred to, and Clerks of Courts refused to take such cases ; and he thought that local Courts had made such decisions. He was instructed to refer the matter again to the Government for reference to the Attorney General.

(*e*) *Megasse Pulp* :—

The Secretary said he had published the letter from the C. S. O. submitted to the last Board Meeting with reference to Megasse pulp being utilized for paper making here, but he had not published the figures given, because on checking over these he found what was evidently an error. An item was quoted as 0.42 of a penny which ought to be 4.2 of a penny and the totals seemed to be incorrect as typed.

He was instructed to write the Colonial Secretary pointing out this error.

(*f*) *Laws Relating to Agriculture* :—

The Secretary submitted letter from Mr. Palache in reply to his letter asking him if he would be prepared to undertake the compilation of a small booklet containing the Laws relating to Agriculture, to be written in simple language. Mr. Palache wrote ;—"It will surprise you to see how few Agricultural Laws are on the Statute Book. All matters relating to Agriculture are stuffed away among other Laws and will give much trouble to work out, and it will be impossible to state until the work is done the time and work involved. You had better let me know how much the Board is prepared to spend on this and I will then see if I can do it for that."

The Secretary was instructed to write Mr. Palache that the latter was in a better position than the Board to know the work involved, and to ask him to make a quotation. The Secretary was also instructed to ask Mr. Palache to submit a sample of one of the Laws transposed from legal language into simple language, as for instance, the Cattle Trespass Law, or Dividing Fence Law,

(*g*) *Cotton* :—

The following letter from the C. S. O. was submitted :—

No. [illegible] 18th November, 1913.

"With reference to previous correspondence ending with the letter from this office Nos. 11586/13694 of the 17th September last on the subject "Leaf Blister Mite of Cotton," I am directed by the Governor to transmit for the information of the Jamaica Agricultural Society, a copy of a letter which has been received from Mr. C. Watson with a rough draft of rules, for the treatment of the disease.

2. "I am to say that the Director of Agriculture, to whom Mr. Watson's letter and enclosure were referred, advises, that as the rules made by the Governor in Privy Council on the 9th September last are considered too drastic though in reality the minimum for any actual control of the past, the Leaf Blister Mite Disease be withdrawn from the schedule of the Infectirus Diseases of Plants Law.

3. "I am to observe that it would be impossible for the necessary Government supervision to be provided to control the disease under the conditions proposed by Mr. Watson, if cotton cultivation is extended. His Excellency thinks it would be more practical to adopt the St. Vincent system of destruction of plants after the crop and for Mr. Watson's advice to be circulated to growers by means of leaflets, and His Excellency would be glad if the Jamaica Agricultural Society would consider and report on this."

(Sgd.) P. C. Cork,
Colonial Secretary.

DRAFT OF RULES FOR THE CONTROL OF THE LEAF BLISTER MITE.

1. Any person owning or being in charge of cotton plants which show signs of being infested with Leaf Blister Mite shall pick off such leaves as may be infested and immediately destroy them by fire.

If however the infestation takes place at such a time that the bolls are maturing then, and in that case it shall be permissible to allow the cotton to ripen and be reaped before taking any measures to control the mite.

2. After the reaping of any crop of cotton all plants infested with Leaf Blister Mite shall be uprooted or cut down and every part of such plants destroyed by fire as soon as they are sufficiently dry to burn.

After discussion it was decided to refer this matter to the Staple & Minor Produce Committee for consideration.

The following further letters from the C. S. O. were submitted:

(a) Re Recommendations in Report of Committee *re* Manchester and S. St. Elizabeth.

No. 13152/16326. 28th October, 1913.

"With reference to the report of the special committee appointed to consider the conditions existing in Southern Manchester and Southern St. Elizabeth, a copy of which was submitted with your letter No. 2758 dated the 21st July last, I am directed by the Governor to observe, that in par. 3, under the heading "Provisions," reference is made to the advisability of encouraging the manufacture and storage by settlers of farine and to say that as His Excellency understands that a pan for the manufacture of this product, was once before imported and tried by your Society, he would be glad to learn what was done at that time and what results were attained.

"In the same paragraph of the report, under the heading 'yams' His Excellency observes that the Committee considered that there was a probability of a shortage in the supply of yam heads for planting, especially in southern St. Elizabeth, and I am to say that His Excellency presumes that the matter has engaged the attention of your society, and that he would be glad to know what has been done in the matter,

"His Excellency, I am to say, also observes in the report, under the heading 'Corn' that the Committee refer to the need for further effort being made to induce settlers to grow 'guinea corn,' and I am to point out in this connection, that there are several descriptions of drought resisting maize to be obtained, some obtainable from the United States of America and some from the Argentine Republic. His Excellency has seen experiments with this maize, and on a limited scale with satisfactory results, I am to say that His Excellency would be glad if your society would, without delay, import and experiment with these descriptions, particulars of which can be obtained from the Imperial Institute."

(Signed) P. C. CORK,
Colonial Secretary.

The Secretary said on receiving the letter he had sent the following reply to the Colonial Secretary :—

November 6th, 1913.

The Hon. The Colonial Secretary,
Kingston.

Sir,—With reference to your letter of the 28th ultimo, relative to the report of the Special Committee re Southern Manchester and Southern St. Elizabeth, I have the honour to say for the information of His Excellency the Governor, that the manufacture of farine from cassava by this Society was carried through experimentally after the great drought of 1897-1898 with success, so far as making a palatable and nutritious meal was concerned. A mistake, however, was made in importing a pan nearly a ton in weight, which while excellent for the purpose if it had been meant to be stationary, was far too heavy to be transported readily from place to place. The cost of the pan was £18. Later experience showed that two lighter pans which could have been easily moved on a dray would have enabled expositions of farine making to be given right through different districts instead of at given centres, at which many people did not attend. Even in the case of demonstrations at Agricultural Shows there was great difficulty and expense in transporting this heavy pan.

At that time, however, this Society had only a few branch Societies and only part of the time of one Agricultural Instructor [Mr. Cradwick] in addition to occasional travelling by the then Secretary [the late Mr. G. A. Douet]. Small settlers were not interested in the Agricultural Society; there were no local Societies all through the districts under consideration, for instance, and our operations did not appeal to them. Shortly, we did not "get at' the people we desired to interest, as we could get at them now.

I do not think the farine made was even made available for small settlers in these districts to try as a food. It was brought to Kingston and tried to be popularized from this centre. A trial was made of it in the Penitentiary and reported on as per extracts from the *Journals* for February and March 1901 attached hereto.

Now, however, there would be little difficulty in getting farine made before a crowd of 50 to 100 people in each locality and in getting it in the form of porridge, cakes, etc., tried by all the members of local Branches, at least. The manufacture and use, and the desirability of having a food that can be stored can all be explained with effect now, I am sure.

YAMS.

2. There was a shortage of yam heads for planting, especially of "Afoo" or Yellow yam heads, which can only be planted from "heads" and not from "bits' as varieties of the white yan can be planted, and so the increase is slow. I found that yellow yam heads could not be had in any quantity anywhere, and as they do not keep well, to collect small quantities from various seasonable localities in far mountain districts, would have required a great deal of organizing, would have made the yam heads very expensive, and would at the best have been risking plants arriving in poor condition. Small quantities of the hardy and easily propagated drought-resisting St. Vincent yam were sent out, but it is not a fine eating yam and it does not keep well if long out of the ground. It is a useful "hard time" yam for the home. Yellow yam will still be scarce in most places and I rather think for some years yet.

GUINEA CORN.

3. Experiments with different varieties of Sorghums, usually called here "Guinea Corn," have been carried out in the Experimental Grounds No. 1 and 2 in Southern St. Elizabeth and Southern Manchester, respectively, and packets offered for sale and distribution, but the people are very conservative and would rather plant Country Corn [Maize] on the chance of getting a crop, than plant Guinea Corn with the probability of getting a fair return of grain and certainly plenty of forage.

The ordinary Jamaica variety of Guinea Corn only heads [seeds] in January and February, no matter when planted, but if sown in the spring it grows very luxuriantly and yields a very large crop. It can be planted right on to September, but gives a smaller yield the later it is planted. I have several times imported quick growing varieties which can be planted any time and will bear within six months, some of which bear large grains very useful for food. These are Dhurra [East African red and yellow], Kaffir Corn [white and red South African], Jerusalem Corn and Mil Maize, varieties grown in the dry belt of the Southern United States. I have personally grown these in years past over and over again for feeding poultry and think continued effort might be made to popularize them. They suffer greatly from the attacks of birds when seeding, but this is because they are not generally grown and the birds concentrate their attention on any small plot in one locality.

CORN.

I have repeatedly drawn attention to the desirability of growing a drought-resisting corn (Maize) but have not been able to arouse any interest in this. In March last I imported from the United States Department of Agriculture in Kanzas some of their experimental crosses of American varieties with drought-resisting varieties discovered in China and Mexico. I sent these to Mr. Palache's experiment ground at Clover, Mandeville, and to the Instructor for Southern Manchester and Southern St. Elizabeth to grow in the experiment grounds there. Only one of the varieties grew and that the least imposing small cob, and small seed. I pointed out that these varieties would require to be bred up and asked for the seeds to be planted again. I am afraid this has not been done. It is difficult to arouse any interest in anything that takes time to show results. All our efforts in experiments have always been disjointed from various causes.

I forward some copies of the Agricultural *Journal* containing some matter on these subjects. I have marked the pages.

I have, etc.,

JNO. BARCLAY,
Secretary.

The Board approved of the reply of the Secretary.

The President said he might take the opportunity to inform the meeting that it was proposed to put on the estimates for next year a sum of money to enable a Central Experimental Station to be established in these districts referred to, when some of the ideas put forward in the Report could be carried out. In this Central Experimental Ground they could grow drought resisting crops and also carry through experiments in the breeding of stock. Of course this would depend upon the condition of the finances.

The Secretary submitted samples of East African Dhurra which grew within five months and seemed to be the most promising of all the varieties of Sorghums tried. It resisted dry weather, was very prolific, while the seeds were large and not so hard as the Jamaica Guinea Corn. He also submitted samples of Broom Corn from the Experimental Ground and a sample of the broom that could be made from the heads.

(b) Re Trade Marks :—

No. [illegible] 12th November, 1913.

"With reference to your letter No. 2809 dated the 22nd July last on the subject of the shipment of packages of citrus fruit which are not marked with a trade mark, I am directed by the Governor to acquaint you, for the information of the Jamaica Agricultural Society, that it has been decided with the advice of the Attorney General that prosecutions should be instituted in all cases in which agricultural produce is shipped without a Trade Mark and the Collector General has been instructed to take action accordingly.

2. I am to observe that this decision has been arrived at as it is considered that the seizure of the goods is too drastic a measure and a fine might be sufficient."

(Sgd.) P. C. CORK,
Colonial Secretary.

Estimates :—

The Secretary submitted the following report :—

The Office Committee met on Wednesday 19th November, 1913 at 2.30 p.m. Present Hon. J. R. Williams; Messrs. A. W. Douet, A. C. L. Martin and the Secretary John Barclay.

Apologies for absence were received from Hon. D. Campbell and Bishop Collins.

The business was to receive Statements of Accounts from the Secretary and to consider the Estimates for next year.

The Secretary submitted statements as follows :—

I. Statement showing (a) Estimates for 1913-14; (b) Amount spent to 30th September 1913; (c) Estimated further expenditure to 31-3-14; (d) Total estimated expenditure as at 31-3-14; (e) Saving: Excesses.

II. Abstract of accounts for 1913-14 showing an estimated balance at credit as at 31st March, 1914 of £238 10s. 10d., as against the balance at 31st March, 1913 of £408 6s. 11d.

III. Statement of Outstanding Accounts as at 30th September

IV. Statement of Stock in hand as at 30th September,

V. Statement of Receipts and Expenditure, and Balances on Deposits Accounts as at 30th September.

It was shown that the total of the Estimates for the present year amounted to £5,551 12s. 0d., that the total Expenditure as at 31st March, next, was estimated to be £5,699 0s. 6 d., that, however, special grants had been given, not contemplated when the last estimates were prepared of (a) £25 for Special Prizes in the Prize Holdings Competition, (b) £18 10s 0d. for Special Prizes for Corn and Cotton Growing in School Gardens, (c) £60 for Experimental Cotton Plots; and (d) £100 for Mr. Palache's Experimental Ground at Mandeville,—being a total of £203 10s. 0d.

Excess	..	£147	8	6
Special Grants	..	203	10	0
		£56	1	0

The Committee considered the financial position of the Society satisfactory. They recommend the following estimates for next year.

The Estimates for Instructors are dealt with by the Instructors' Committee.

The Committee did not deal with the question of a successor to Mr. Bunbury, the Assistant Secretary, who resigned as at 31st October, as he was paid out of the Instructors' vote.

The matter of the continuation of the Central Experimental Plots is also dealt with by the Instructors Committee.

The Committee left the matter of the continuation of the scheme for the Prize Holdings Competition for consideration by the Board.

(Sgd.) J. R. WILLIAMS, Chairman.

The Estimates will be printed in next Journal.

The Secretary said that the Instructors Committee met as usual that morning but they did not get through the whole of the business and the Committee had not finished their consideration or the Estimates. They would therefore require to meet immediately after this meeting of the Board or he would require to call a Special meeting for another day.

Mr. Williams said that the Office Estimates were substantially the same as last year ; they were not asking for any increase of grant

It was resolved to accept the Estimates as prepared by the Office Committee.

It was resolved also to accept the Estimates to be prepared by the Instructors Committee in order that there should be no delay.

Prize Holdings Competition :—

The Secretary said that it had occurred to him that the Prize Holdings Competition might be dropped for two or three years as he found that through various causes there was not the same interest and enthusiasm taken in it since the last Government valuation of holdings. The amount of £125 allocated for this Competition could be utilized he thought with better effect for a few years for special competitions throughout the country, such competitions of course to be carefully considered. In some parishes there could be special prizes to stimulate Cocoa growing, in others Coffee growing, in others Corn growing and so on; whatever might be decided.

Mr. Williams said he would like to hear the views of the Agricultural Instructors first in the matter, then it could be considered at the next meetiug. The Prize Holdings Competition had done a great deal of good for the country.

The Secretary was instructed to communicate with the Instructors and ask their opinions.

Authorized Persons :—

The Secretary said that a resolution had been submitted from the Bath Branch as follows :—

"That the time has come when the "Authorized Persons" appointed under Law 4 of 1909 should be placed on an equal footing with the regular constables in respect to their powers and protection under the Constabulary Laws when acting in the course of their duties."

This matter had been referred to the Instructors Committee who unanimously recommended that the "Authorized Persons" required the same protection as Constables.

The Board adopted the same view and the Secretary was instructed to forward the resolution to the Colonial Secretary.

An application from Mrs. S. F. Noyes, Bowden (St. Thomas in the East) for the appointment of Augustus Seemorer Breakenridge, Style Hut, Port Morant P.O., as an "Authorized Person" was submitted, and the Secretary was instructed to send on the name to the Inspector General, for the usual enquiries to be made.

Affiliations:—

The following applications for affiliation were submitted:—

(a) Black Hill, (Portland).
(b) Mount Industry, (St. Catherine).
(c) Williamsfield. (Riversdale).
(d) Northern St. James, (Montego Bay).

The Secretary reported that the Instructors Committee had gone carefully into these applications and recommended affiliation to all: Mount Industry was a sub Branch which was now strong enough to be a Branch.

Grants to Shows:—

The following applications for Grants to Shows were submitted:

(a) Clifton-Newstead, (b) St. Thomas ye Vale.

Mr. Martin said he would like to point that the latter Show had not awarded all the Cups and Prizes that they offered at their last Show held, and he thought that in future no Shows should receive Grants which did not fulfil all their obligations.

The Secretary reported on the circumstances, and he was instructed to write the St. Thomas ye Vale Show Committee that a grant would be given to their Show on condition that the Show should take steps to satisfy the three exhibitors who had made complaints, as reported by him.

The Secretary was also instructed to write the Clifton-Newstead Show Committee that a grant would be given on the usual conditions.

Statement of Accounts was submitted and tabled.

The following new members were elected:—

J. S. Moriarity, Montreal, Canada; Charles Soutar, Kingston; Manuel A. Montejo, Santa Marta, Columbia.

The meeting then adjourned until Thursday, the 18th December 1913, at 11-40 a.m.

PESTS AND DISEASES OF PLANTS.

During my stay in Canada and my journeys through the United States of America I was much comforted by seeing my neighbours troubles. Wherever I travelled I saw signs of the struggle which the Agriculturists there have to wage on insect and fungoid pests of trees. I sometimes feel especially after I have not been away from Jamaica for some years, that our efforts to interest Planters great and small are utterly out of proportion to the results obtained, but when I saw the ravages of disease on fruit trees in Canada and the United States, and then compared the cost of the Agricultural Organizations there and here, I came to the conclusion that we can, all things considered, occasionally pat ourselves on the back. In scientific knowledge of course we must still be content to pick up the crumbs from the rich man's table, and when I see the way that money is simply poured out for men and material in the solving of Agricultural problems abroad, I can only say the marvel is that we do half as well as we do. We have in the time we have been at work in Jamaica got far closer to the Farmer both large and small than has been done in Canada or the United States of America. When I compare the Cocoa, Coconut, and Banana cultivations with the Apple, Pear, Peach and Cherry cultivations of Canada or the United States of America, and then take into consideration the fact that they are supposed to be run by intelligent white people, while the majority of ours are not, the honours certainly seem to be with Jamaica. I certainly did not travel over a large part of Canada but wherever I did go I saw Pear "Blight" which if I had been Agricultural Instructor for the district would have kept me awake at nights, and as for scabby apples they were everywhere "Yellows" in Peaches too seemed to have an easy time. In talking with the Farmers, opinions seemed to be about equally divided much as they are in Jamaica, as to whether the methods advocated by the various Agricultural Departments, and their instructors are or are not a lot of faddish nonsense. The majority of people are I think inclined to believe that plant diseases are the result of too much or too little something; on the other hand some of the Farmers are keenly alive to the danger of trifling with these diseases. This is more particularly I believe the case since the Health Departments of both Canada and the United States are every day becoming more vigilant and are impressing on the various Governments the necessity of preventing people from eating diseased meat, fruit and milk and it behoves every grower of fruit or other foods nowadays to do his utmost to keep his plants free from diseases as any day the health authorities may prohibit the sale of them. In the United States already Peaches cannot be sold from a County having the "Yellow" disease. What a plight Jamaica would be in if the Health Department of the United States were one day to come to the conclusion, that Jamaica Bananas or Coconuts were not healthy food on account of Budrot or "Dieback" Leaf Disease of Coconuts, or Panama or other banana disease, or even suppose a single parish like Portland, St. Mary or St. Catherine were to be 'declared'! This is quite possible, the only sure way to prevent it being to keep them free from disease.

Insect pests seem to be something awful in both Canada and the United States of America. Gangs of men are employed to pick the Cacoons of destructive moths from the shade trees in the streets of the Cities; these go systematically over the trees searching them carefully and depositing the Cacoons in a half bushel basket and throwing them into a cart from which they are taken to a central Depot where they are killed with an acid. One of the men informed me at 9.30 a.m. that he had twice filled his basket that morning, it was nearly full again, nearly a bushel and a half of Cacoons in two hours and a half, each capable of producing thousands of Caterpillars and moths. The two most destructive moths appear to be the Gypsy moth (*Parthetria dispar*) which seems to propagate in a truly alarming manner; and the brown tailed moth (*Euprootis Chryssorhea,*) which seems to be about as prolific as the Gypsy moth, and what is more interesting and alarming from the Jamaica point of view, appears to have made up its mind to pay us a visit, as in spite of all efforts to stop it, it is steadily travelling south through Florida and is expected to make its appearance in Porto Rico or Cuba next; from there to Jamaica is a short journey. Considering the fearfully destructive nature of this pest it behoves us all to look out for it and if possible to kill the first one which would be much easier done, than later on to collect them by the bushel basket full. The Gypsy moth is an ordinary looking little cuss and not easily distinguishable from any ordinary moth of the same size, but the "Brown Tailed Moth" which seems more likely to be dangerous in Jamaica on account of the direction in which it is travelling, is easily distinguished by the lump of brown fluff which serves it as a tail. If this wretch is observed, kill it twice to make sure that it is dead. Moths are one of the greatest enemies the farmer has and every one should be killed at sight: the only good moth is a dead one. It is strange that in this host of destructive pests should be found such a useful member as the Silk Worm.

The fight against scale and other insects is little less than that against Caterpillars, it is apparently a case of Hobsons choice, kill the insects or they will kill you. Fungoid pests too, seem to have attained a virulence which fortunately for us they have not in Jamaica.

On Staten Island every description of tree seems to be attacked: the beautiful Maples are afflicted with some disease which has the same effect as Canker has on our Cocoa. As to Cherries, Plums and Apples I do not believe that ten per cent. of the fine big trees which I saw there twelve years ago are alive to-day and not two per cent. of these are free from disease. New trees are planted every year only to be attacked in their turn, all for the want of prompt intelligent preventive measures. When I pointed out to some of my friends there twelve years ago that there was a probability of this state of things coming about, they smiled. They do not smile now.

Sometimes I believe people in Jamaica think I am a bit hipped on Plant Diseases, but what has happened in England, Canada and America will happen here one day if we do not clean up our cultivations in time Canker in Cocoa costs Jamaica far more than the Agricultural Society. Pod Rot in Cocoa does the same. Bud Rot in Coconuts may one day assume a virulent form and wipe out the most profitable crop in the tropics.

Panama Disease of Bananas has wiped out 6,000 acres of the finest bananas the world has ever seen, in four years ; Providence has promised Jamaica no immunity from this or any other banana disease. The only way to prevent plant or other diseases from ruining us is to wipe them out before they become powerful.

Highly educated and experienced Doctors laughed at vaccination not many years ago. The mosquito theory in connection with malaria is hardly accepted yet, so when people laugh at Agricultural Instructors and Plant Diseases it is hardly to be wondered at.

W. CRADWICK.

:o:

TORONTO EXHIBITION.

You ask me for my impressions of the Toronto Exhibition. I am sorry to say that my chief impression is that of very hard work in the Jamaica Court which I feel sure will not interest your readers very much. To be able to describe the Toronto Exhibition it is necessary to have something to comoare it with, and the only thing I can compare it with in Jamaica is the great Jamaica Exhibition held at Cavaliers Pen in 1891 and it is not everybody who remembers that. To those who do I may say that the buildings at the Toronto Exhibition are about twelve times as large as the buildings at the Jamaica Exhibition.

The Government building, in which the Jamaica Exhibit was placed, is about twice as big as the main building of the Jamaica Exhibition. Besides the Jamaica Exhibit the Exhibits from Trinidad, Tobago, Demerara, Barbados, St. Vincent, St. Kitts, and St. Lucia were all in the same building and constituted the West Indian Exhibit.

Adjoining this was the Exhibit of the Toronto Health Department, a most interesting Exhibit, illustrating by means of thousands of dolls the number of children who die in the City every year through the ignorance and carelessness of the parents, also the number of children who die from consumption. Model homes, model sleeping rooms, samples of filtered and unfiltered water, dirty and clean milk, the proper kind of utensil to wash dishes in and a hundred and one things most of which went to impress on people the importance of little things, and to illustrate the old adage that prevention is better than cure. The Ontario Agricultural College and Agricultural Department Exhibits were in *our* building, the Manitobia Agricultural Department and British Columbia Agricultural Department, and the Fisheries Department were the other chief Exhibitors in the Government Building ; each of these were huge exhibits beautifully fixed up and extremely interesting and each costing several times more than the Jamaica Exhibit. The Manufacturers Building would interest anyone not absolutely stupid for a week. There were 17 other fine large buildings all beautiful all full of beautiful and interesting exhibits, which was the best is a matter of taste, the Agricultural Hall and the Dairy Buildings interested me the most. Honey, Flowers, Fruit, Vegetables, Grains, Field Roots, Milk, Butter making, etc. were all beautiful and interesting as well as highly instructive. Probably Mr.

Barclay would have spent most of his time in the Poultry Building (? Ed) and I would not blame him, but it takes a good bit of an enthusiast to look at 7,000 exhibits of chickens but "Gee" as the Canadians say, there were some beauties there and I wish I had more time to look at them myself.

Of cows the only sort not there were the Indian Breeds, every other kind was; personally my affection was divided between the Shorthorns and the Jerseys, the latter because I know how beautifully rich the milk is, what lovely butter can be made from it and what nice thick cream there was to steal to put on baked apples also stolen when I was a boy. Then they look so gentle and sweet as though they are pleased to see all the visitors. The massive Shorthorns too with their huge udders, promising (and fulfilling) gallons of milk would take anyone's fancy however ignorant of the source of beef and butter they might be. The Holsteins, judging by the number of entries however, are the popular Dairy Cattle in Canada where they appear to thrive wonderfully well. The total number of Cows exhibited was nearly 800.

Horses, Sheep, Pigs of enormous size made up a show of wonderful quality.

Toronto is famous and justly so for well cared horses, nowhere out of England have I seen horses so uniformly in good condition; a shabby horse is so rare that I caught myself staring at one when I met it.

The Grounds of the Exhibition are beautifully kept, tastefully laid out with flower beds, fountains, etc., and an excellent feature, plenty of seats. The behaviour of the crowd was beyond reproach, and when it is remembered that over a million people attended the Exhibition, Canadian people may well be proud of it.

This is the 36th Annual Canadian National Exhibition held in the same place without a break. and this is perhaps the most wonderful thing in connection with it, showing how the Canadian people can unite for a common object, unite in a way which very few people can or ever have at any rate. The Toronto Exhibition asserts that it is the finest annual Exhibition in the world; I believe it and I believe it thoroughly deserves to be.

W. CRADWICK.

—:o:—

CHOP, CHOP, CHOP!

DON'T.

We take the following from the "Farm Journal" of the United States, and add at the end some notes of our own.

"Americans are great folks to chop down trees. When we can't think of anything else to do, we sharpen up the ax and go out and cut down a few trees. We have kept that up until the woods are almost gone.

But something has come in the place of the woods—big floods and terrible drought. First the storms sweep the country, lashing the earth with hurricanes, drowning people, carrying off stock and tearing up the earth generally. Then come fearful dry spells, baking the soil as hard as an oven.

The woods used to hold the water so that it did not rush down the hills so fast, and so we did not have such floods. Two hundred years ago a two-foot bank was high enough to hold the water down of the river Mississippi at New Orleans. Now they need a levee twenty-two feet high, and are not sure that will keep the people safe.

How shall we get back to the old safe way?

We'll never see such forests as we used to have—that would not be best; but we can plant more trees, so that they will help to hold the water in time of storm and thus protect the country from floods, and at the same time keep the land of our farms from being washed away and lost for all time.

Every man who owns a bit of land ought to set out trees. We shall always need lumber. There is no better fuel in the world than that cut from trees. So let's plant more trees, and chop down fewer of them."

To make room for cultivation—often of a kind only—trees have been ruthlessly cut down that grew where it would have been a blessing to the cultivator, and all his neighbours, often to hundreds of others, and in some cases to the whole Island, had they remained. There are rivers and gullies now causing enormous damage by coming down suddenly in greater volume than they ever did in times within the memory of those now living by their banks; these flood waters now cut new courses and carry away parts of cultivation near their banks, cultivations comprising trees that are 40 to 50 years old. All this is caused by the clearing away of trees along the river banks and on the mountain ridges. The very people who are most responsible for the damage done, mostly small settlers, are now realizing that the indiscriminate destruction of trees is a great loss to them individually when they come to own lands they formerly rented; and thinking men know that the loss is a national loss. It is not the people who are at the heads of streams who suffer most, it is the owners of land further down. And the Government are interested because there is often great loss done to roads by streams bursting their banks. One Branch Society, Brown's Hall, passed a Resolution asking that a Law be passed compelling owners of land along streams to plant trees on the banks; and if they had to cut down a large tree using for any other purpose than holding up the bank of a stream, they must plant another useful tree. It is very significant when a Society composed entirely of small settlers now begin to think in this way.

The Road Departments are always planting trees, especially bamboos, along roads with steep banks, and this is done to prevent landslides, but is it not of more importance that the banks of streams should be held together by tree roots, which mat the soil and form a rampart against flood waters, keeping them within their proper bounds?

Then again tbe clearing of virgin forest from the mountain ridges has caused national loss. And what good has the clearing of mountain rock-stone lands done; only a few years catch crops grown, and then a cry for more virgin land.

The Government itself has sinned in this respect in the past *i.e.*, in selling lands without proper discretion. No rocky lands owned by the Government on mountain tops or ridges should be sold or allowed to be cleared. We have seen thousands of acres of Government land on mountain slopes 3,000 feet up, at the source of streams which were devoid of trees, and under coarse grass, burned over from end to end repeatedly and no action taken about it, nothing said about it.

Wherever this is good cultivatable land in valleys or the lower slopes these should be put in use, but to sell, or lease or rent the upper parts of mountain ridges and mountain tops, should be

accounted a crime against the country, in our opinion. And where-ever land is cleared for cultivation no trees should be allowed to be cut away from river banks unless other trees are planted in their place. A good many owners of land are recognizing this of themselves and the greed to cultivate bananas or cane right up to the edge of the rivers is giving way and bamboos and other strong rooted trees are being planted and which also will act as wind breaks.

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CORN GROWING.

In the Spring there is very likely to be more corn planted than ever before.

There is a very decided increase of practical interest in the growing of larger and better supplies of corn, and in storing it in such a way that it will be kept safe from the attacks of weevils. Our imports of corn are very large, and although through adverse seasons we may possibly require to depend upon other countries sometimes for a part of our supplies, still in the ordinary run of seasons we should be able during the next few years to cut down the figure for our imports very considerably in comparison with the average of the last ten years.

We have had only one really good season for growing corn since 1907 ; 1912 was the poorest year of all, through drought. Formerly the growing of corn on any considerable scale was pretty well confined to a few parishes, mostly St. Ann, Manchester, and St. Elizabeth, the last named coming first in output. The parts of St. Elizabeth which grew the most corn, were the central and southern, which are the parts most subject to drought: the northern part of St. Elizabeth has usually a large rainfall. The parishes of St. Ann and Manchester have red soils which are soon subject to the effects of dry weather, and while those effects can be obviated to a large degree by mulching, the crops that are mulched most, are those that take longest to grow and are most valuable, like yams and bananas. There is not usually enough mulch to go over the corn fields. And then the ordinary methods of planting corn do not permit of the plants resisting any considerable period of dry weather. To plant corn in chop holes in the ground gives a fair crop when there is plenty of rain and the ground is kept soft and moist, but the roots of the plant cannot go deep enough or far enough as they can when the soil is well cultivated ; and so the hot sun affects the plants if the roots are shallow and confined to a small area, more than if the roots can travel wider and deeper. Yet we may say that there are often poorer results from ground that has been well forked or ploughed than from corn planted in chop holes, simply because the forking or ploughing to loosen the soil is only part of the process of cultivation, and this process is usually done hastily, immediately before planting, and the soil has not had time to firm down again : then we do not use rollers for firming down fields as should be done when the soil is broken up to make it as fine and loose as possible ; thus the seeds are not planted in a good seed bed but find themselves in such loose soil that instead of their being in contact with the soil particles and kept moist so that they may ger-

minate quickly and the roots come in close contact with the soil, they are lying loose ; the dry air penetrates too much and may dry out the seed or the roots if these get started in wet weather. This is not understood because we have seen so many blunders made in this way. We have often written about the necessity of firming the soil in connection with garden cultivation ; the same applies to the field. People do not seem to understand that there is a difference between hard soil and soil that has been made soft yet *firm*. The soil should not be loose or open around the seeds when they are planted.

There is now a greatly increased interest in corn growing in parishes where it was not much grown before. As a matter of fact, corn was in plentiful supply and cheaper in St. Catherine this year than any other parish. The western parishes, especially Westmoreland, are taking up corn growing, and we hope yet to see corn grown more in St. Thomas than it has been in the past. If the growwing of corn is widespread through the different parishes, it also allows of corn coming in at different periods. In seasonable places corn can be planted in the middle of January, and sometimes even in the middle of February which is usually the driest month of the year, but in Manchester, St. Ann and St. Elizabeth, from the middle of March to the middle of April is usually the limited period when corn can be planted for the Spring crop, and from the middle of August to the end of September for the second half of the year ; while in some other parishes corn can safely be planted in October and result in a good crop.

There is also a very largely increased interest in choosing seed corn, and enquiry for good seed corn has become very widespread ; formerly there was no idea of planting anything but what seed came handiest, taken at random.

PREPARATION OF SOIL.—In the thorough preparation of the soil, however, there is not so much trouble taken as there ought to be, and this is partly owing to the above error in cultivation that we have mentioned—that chop hole methods often give better returns than what are produced from well forked or well ploughed soils. This applies more especially to the red soils which are naturally loose and open. In gardens the same mistake has been made and is being made in imagining that breaking up the soil fine to be immediately followed by planting the seeds in loose soil, is the correct method. Forking and ploughing serve two purposes—one is to bring up gradually the new soil from below that is not touched or utilized when small holes are made in the soil year after year with a hoe ; the second reason is to allow the roots to travel easier through the soil and further and deeper ; and they will do this better in a soft firm soil than in a loose open soil. Often cabbage and turnip seeds that a man may spill on the footpath germinate better than in his nicely forked and *loose* seed bed.

When beds for garden vegetables are made, fork deeply so that the clods may be broken up, then when planting firm down with the back of a spade or put a board on and walk over it ; and then when the drills are made to hold the seed, the bottoms of the drills should also be firmed a little, and when the seeds are covered the soil should be firmed over the seed, then a little loose soil drawn on the top. In

planting on a field scale, when the soil is forked or ploughed the same firming process must take place. This does not apply so much to heavy clay soils where the difficulty is to get the soil broken up fine enough. In this case the soil should be broken up roughly at least two months ahead and left to weather. In those districts of heavy rainfall the first few heavy showers often firm down the soil enough. We speak more for those districts where there is red dirt, which is naturally a hot soil, and which is often loose and dusty especially in dry weather. Here, firming the soil is essential.

PLANTING.—In planting the seed too, we have been watching several experiments of planting thickly and thinly, close in the row or in the usual fashion 3 to 3½ft. square and we rather think that 3 seeds to the hole, so long as they are not thrown on the top of each other but carefully planted in the hole a few inches apart, set in a triangle, with the square method of planting 3 to 3½, feet between holes gives better results, whether the soil is cultivated by hand or by plough, than planting one or two seeds together, 1 or 2 feet apart in the row.

PESTS.—There are so many pests now prevailing that as a safeguard all the seeds to be planted should be treated first. Now-a-days all the oats and wheat planted in Northern lands are treated with preparations, one of which called Corvusine seems to be highly successful in keeping off the attacks of worms, grubs, birds, mice and rats. It has been an old practice here to soak the seed in a decoction or solution of bitter wood. This is a good method, but it is more trouble and expense to prepare this decoction in most districts where bitter wood is not always handy than to adopt the method we have usually employed with the greatest success, and that is to pass the seeds through wood ashes which have been damped with kerosine. The effect of pure kerosine alone is not so lasting as when the seeds are coated also with the wood ashes.

We think this is also better than soaking the seeds in gas tar and water or Jeyes Fluid and water. Even pure tar can be used to coat the seeds and we have done this, but even in this, the operation must be closely supervised; and it is a messy, dirty way and often a wasteful way as some of the seeds get too much tar and although tar is cheap still it costs a little money. We have never made careful comparative experiments in planting seed corn treated in different ways, but we should like to see these carried out. Meantime we know the coating of all seeds with kerosine and wood ash to be very effective.

But there are many other enemies to the corn after it gets safely sprouted and appears above the ground. The effect of the kerosine or tar or any other treatment is only on the seed and does not affect the tender plants. But if the treatment has not been enough, field mice and rats often discover that the nasty taste has worn off just as the seed is sprouting, and at that stage the starch from the corn is sweet and so the grain is attractive. It is not difficult however to circumvent rats and mice. Bamboo pots with poisoned grain in them of the same kind as those planted can be laid all about the field. We used to put two poisoned grains on the top of the hole after planting and this is very effective, but we found that

it poisoned birds as well as mice and rats, so adopted the bamboo pot method which, however, is not quite so effective but is safer. Now cut worms sometimes do damage. These are small grey caterpillars which live in the soil generally among heaps of trash or rubbish. Slugs or small snails which also lurk in heaps of trash or mulch also attack young corn. When the plants get safely over this stage, there is the ordinary caterpillar and now we are informed of a beetle that does damage. This has been recognized as the Leaf Hopper, a variety of insect which also does damage to plants in other countries though not much here. This pest however has not been reported to us commonly.

The more generally any plant is grown, the more highly developed it becomes, and the more birds, lizards and spiders are destroyed, which are the natural enemies of the insects, the more insect pests we shall have. We must remember that all the caterpillars and cut worms (but not the snails and slugs) are hatched from insects, like moths and beetles, and those very large spiders that some people can never see but they must kill them, live on insects. Spraying and dusting of crops is a regular practice now whenever planting goes on in most other countries and their operations will have to become regular practices here.

DRYING :—In one direction we still fail very much, and that is in not drying the corn sufficiently when taking it in. We have had seed corn sent in to us weighing 64 lbs. per bushel, and as this had to come by coastal steamer it was plain to us that it was too damp and would probably have heated or sweated on the way and been of no use for seed although good enough for horse food. Kingston sun is hot, and this corn was dried under a metal roof ; in two days drying the weight was 62 lbs. per bushel, in another two days the weight was 60 lbs. per bushel; it was then stored in tin-lined barrels in a shed with a metal roof and in a week was 58 lbs. per bushel and was then "bone dry." This is an appreciable percentage of shortage in taking the price into account and the labour in drying, which was considerable. If this corn had only come a short distance it would probably have been good for seed, but having come a long distance and got heated the germination test was very poor. This shows how careful we have to be. We do not mind receiving corn weighing 60 lbs. per bushel and in giving it a thorough drying: when if it is the ordinary red corn it will weigh 58 lbs. per bushel and be thoroughly dry, and if it is almost yellow corn which is now becoming more common, it can dry to the same weight as the imported American corn, that is, 56 lbs. per bushel.

In the first place the corn cobs are not allowed to become thoroughly dry in the field ; that is where the drying should take place first. In a dry climate field-drying can be done safely, but where the district is rainy, the corn is apt to rot at the tips and even start growing if left in the field. The way to get over this is to break the corn. that is, turn the head down and leave it for a few days. It should then be thoroughly dried in the cob on a barbecue or in the house. The cobs selected for seed should have the husks turned back and be hung up to dry thoroughly where there is a breeze blowing on them but they should not be allowed to get damp. Seed corn should be thoroughly dried in the cob. This year

we had a quantity of seed corn brought here in the cob, and when we had it stored awhile and shelled it out it weighed slightly over 56 lbs. per bushel.

We have often written about the larger proprietors growing corn more extensively and using the plough, harrow and cultivator. A roller would be an advantage but could be dispensed with under ordinary circumstances, if those planting, walk along the drills made by the plough and drop the seed in, then cover and firm the soil.

When pastures become foul with weeds, say after a long drought, when the cattle graze down to the very dirt and even pull out the roots, the best way to re-establish a good pasture is to plant corn. The usual system is to let out parts to small settlers to grow crop for a few years but this is not always satisfactory. The quickest method is to plough the land and plant corn. Where lands are not too steep, a hillside plough can be used and corn does not require such deep cultivation as is required for preparing for cane or bananas; from 4 to 6 inches deep is usually enough, and a very fine crop is usually secured after ploughing in the sod. We know several penkeepers who are doing this, and one has assured us that he has raised corn for 1s. 6d. bushel. We know personally that this can be done. That further interest is being taken in growing corn on a large scale is shown by the following letter, but we prefer not to give the name.

August 30th, 1913.

"I am taking up the cultivation of corn on a larger scale at..... .... The two properties have a good deal of lands unsuitable for bananas, a little too much clay, and I hope with good cultivation to grow enough corn to supply all our stock.

I am figuring, conservatively, on 20 bushs. per acre and two crops per annum at a cost of 2s. per bushel.

I have read all you have published in the JOURNAL but I still want more information and if you can spare the time to give me the benefit of your experience I shall be much obliged.

I propose to cultivate as follows:—

Plow, Harrow, Cross-plow Disc-barrow, Plant 6 ft. x 3 ft. with corn planter, keep clean with implements, irrigate once a month for first 2 months. When corn tassels, plant through with cow peas. When corn crop is reaped disc-barror and turn in all vegitation with large plough, Now this is what puzzles me.

How long after plowing in cowpeas can corn be re-planted?

If planted immediately would the rotting of cowpeas heat and spoil corn?

Can corn be planted every month in the year, where you have irrigation?

Which is the better seed,—Native or Imported?

Do you think turning in a crop of cowpeas with corn stalks equal to corn reaped, or would the land become exhausted eventually?"

CORN.—Experiments have been made in the feeding of corn grain alone and in feeding the whole head of corn, that is the corn and cob ground in a mill together, and it has been found that while cracked grain is better than whole grain in feeding horses, corn and cob meal mixed together is still better. Therefore those who grow corn and feed horses must realize that there has been tremendous waste going on, in feeding the corn grain alone and throwing away the cob, as useless for food. If, as is found, there is considerable food

value in the cob when it is crushed into meal, and so made easy to be eaten, and made more palatable by being crushed along with the corn grains, a great saving in feeding beasts can be effected.

The trouble is we have not had mills for grinding both together but that we will see to.

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WHAT A REAL LIVE BRANCH COULD EFFECT.

A week or two ago I was present at an interesting meeting of a Branch Agricultural Society at which there was a very earnest and useful discussion of that article in the March number, 1912, of our Agricultural JOURNAL entitled "Brains on the Holding." I came away from that meeting impressed by two things, first, how few of the members appeared to read their JOURNALS at all and second, how few appeared to appreciate what they read and attempted to apply the knowledge so gained to their own circumstances.

Thinking of these things I seemed to fall into a dream and this is what I dreamt :

I seemed to be at a meeting of some Branch Society, and the Secretary was calling the roll call, at the beginning of the meeting not the end, which struck me as curious : I noted 100 names were called and 98 answered to the call, whilst two letters of regret and apology were read from the other two. I noted next that there was no waste of time over trivial executive matters, but at once the Branch settled down earnestly to discuss some matter that concerned the agricultural welfare of the district, and the financial benefit of all the Branch members and those around. It seemed to me, in my dream, that I was shown that each of these men was a real earnest live member of the Branch ; there was no indifference, no doubt, but a firm belief and determination to make the work of the Branch help each and every one of them. The matter under discussion just then seemed to be the improvement of the live stock of the smaller proprietors round the district. The whole subject was carefully discussed and it wss finally determined to start by improving the poultry around.

Speakers brought out that none of them had a hen that laid more than twenty or thirty eggs in a year, and none laid at the time when prices were best. Some one else read a paragraph from the JOURNAL showing how in other lands a hen laid over 200 eggs in a year. Thus it was determined to lay out funds in purchasing eight good roosters which were to be passed around to each member in turn for use in his fowl yard. Each member promised to pick the best hens he had and not to exceed five in number. Each member then and there laid down 1/ or £5 in all towards the expenses. It seemed to me then that it went far ahead into the next two years and I saw that each of the 100 members had obtained and raised 10 good hens of the improved variety and that instead of laying only 20 to 30 eggs in a year these hens were laying from 60 to 80 eggs in the same period ; whereas ten of the old hens only gave each member at the rate from 2/ to 3/ per annum the new breed gave from 6/ to 8/. I figured this out over the 100 members and found that the members of that Branch were making £35 for

eggs as against £12 10s. in the previous year. The outlay was only £5 of which at the end of the first year £2 10s. was returned by selling the young roosters to others. Here also I realized that there were 500 other people in that district who had not joined the Branch but to them the members sold their half-bred young roosters, so that the general output for this community in eggs was improved by one-third in 2 years time, so that every one who sold 1/ worth of eggs in the old days now sent 1s. 4d. worth to market,

Again I seemed to be present at a meeting and the question of improvement of the goats in the district came up, and was discussed. On taking a census of the 99 members present it was found that on an average each member, for his family paid 6d. per week for condensed milk. That meant 50/ a week or £130 per annum. The figure astonished a good many of the members. It was decided this must be stopped, especially as it was felt that fresh good goats milk would be so much better for the growing children. Each member promised to procure or pick out the best young ewe he could find, looking for a good square built goat with a promising udder and teats. Each member put down 2/ on the spot and a fine Billy goat was obtained at a cost of £3 of a milking strain. I began to wonder how the members would make out in regard to caring and keeping the new acquisition. I had, however, forgotten the one important factor, viz. that these 100 men were in earnest and no personal or petty trivalities would stand in the way of their procuring good results from their agricultural efforts. Each member took the goat in turn, and each took care of it for a fixed time according to a pre-arranged retenue, and no one failed. And as in the case of the poultry, so in the case of the goats, I seemed to see the results growing and spreading far into the future. I saw each member at the end of two years with two good ewes raised from the selected ram giving 1 quart to 1½ quarts of milk per day. I saw the £130 spent on condensed milk saved altogether, and more, I saw that nearly half the outside community had also ceased to spend money on tinned milk having obtained Nannies of the new breed. Moreover, I perceived that whereas before these men sold their young goats at a small figure each as 5/ or 6/ at 6 months old, now they obtained easily from 15/ to 20/ for a well grown goat, as their improved value was recognized far and wide. I found it impossible to see the actual value to the district but I saw it must run into some hundreds of pounds per annum in a short time. There was the money saved from buying condensed milk; there was the better health of the children, and the usual Doctor's bills; there was the prices better and the constantly spreading circle of influence.

Then through meeting after meeting I seemed to pass, and at each some new subject was dealt with and some new object achieved. The improvement of their pigs was taken in hand and a pig introduced that could be sold at 30/ when 6 months old as at 10/ or 15/ price for the old sort. Better conditions were introduced and less disease was apparent.

Again the Branch dealt with co-operative efforts and carried them out. All the cocoa in the district was sold in bulk through the ranch; they had their own drying factory, best methods were em-

ployed, best prices were obtained. Thus also with coffee, and nutmegs and kola, and sarsaparilla, and all the products that admit of co-operation and better prices by being sold in bulk. The whole district began to feel the influence of this sensible Branch, everyone began to co-operate, and everyone began to be much better off. Prices of such products went up by leaps and bounds till the people obtained one-third more by better and co-operative measures than they had done before ; also in order to obtain the best products each member realized he must use the best of means for pruning, prevention of diseases, cultivating and caring his fruit trees. So as I gazed into the future I saw that from that Branch in that district there grew up a prosperous, well fed, well clothed, well behaved people, and I felt that the work done by that small Branch of 100 members might without exaggeration be figured as worth £1,000 to that one little district each year. The thought also came to me that there are over 100 such Branches in Jamaica and if one of these did as this Branch, £100,000 would be added to the people's prosperity. Then I thought as they spent that money so automatically would the Government by increased revenue be able to add £10,000 of improvements to the roads and means of getting out the people's produce and I saw plainly that these improvements rest largely with the people themselves, who by greater care and greater skill in agriculture, and produce more products and so produce the means to more improvements.

I wondered why this Branch had produced such results and I perceived it was because the members were real members, earnest members, live members, they joined for a purpose and they worked steadfastly towards that end with a clear vision before them of what they meant to do. The result was success. As I awoke and the visionary Branch vanished, only the actual Branches remained. Was there anything impossible in the visionary Branch ? it is but a fact that the results outlined can be made real and living. I believe so, we are writing for the ideal Branch no doubt, but at any rate we can aim to get near it. There is no question that a Branch can produce the results I have indicated. Then why do they not at present, why is there so much failure and so slow progress ? Is it chiefly because so many members do not really and truly believe in the possibilities to be obtained through these Agricultural Societies ? Is it not because the members are so often not real, live, earnest seekers after better things but are indifferent, doubting, dabblers in agriculture. What a grand day it will be for agriculture among our small proprietors in Jamaica to-day, when they realize that the making of Jamaica and of themselves lies largely in their own hands and through their own efforts and that these Branch Societies, properly controlled are their best friends and guides.

L. A. WATES.

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A wealthy Chinese, long resident in Honolulu, declares that "Formosa will do more than any other country to ruin the sugar industry of Hawaii in the event of the abolishment of the duty on that commodity." He points out that for months past, machinery for immense sugar mills has been shipped for Formosa There are thousands of acres of untilled land for sugar there, and many thousands of labourers who will work for almost nothing.

RATS.

RAT VIRUS.—We have imported supplies of "Tropical Ratin," a rat virus made specially for tropical conditions. Some years ago the ordinary rat virus was used here by growers of cocoa but it was only partly successful and in some cases proved useless because as the Virus is made in Europe to suit conditions there the germs became inert here with the heat. This rat virus is not used at all now because of this. "Tropical Ratin" can stand our high temperature and can keep good for 6 months.

As most readers may know this Virus is not a poison like Arsenic or Strychnine, but contains germs which give rats fever. This fever is contagious and spreads among the rats very rapidly.

The tin may seem expensive as the cost is 6/ but we must take into consideration that in the taking of the baits made from one tin may kill scores, and even hundreds of rats and so may be cheap in the end. If the bait is plentiful the rats will be sure to take it away. This virus has been found very deadly for rats, so far as the results of one tin go.

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RAT KILLING COMPETITION.

We publish below some results of a "Rat Killing Competition" held by the Fair Prospect Branch (Portland). This is very commendable and it is to be hoped that other Branch Societies will follow their good example :—

"The above Society took up a campaign against rats, and started a "Rat Killing Competition" during the months of May and June last, but owing to some interruption in our regular monthly meetings prizes were only awarded in August. Rules were laid down, the Circuit from Panton's Hope to Sherwood Forest was cut out into districts, and a Receiver with a book appointed for each district.

Five prizes of from 5/- to 1/- were to be awarded, the least maximum number to receive a first prize being 100, and the minimum number for a fifth prize, 25.

Great interest was shown by some of the Receivers, and Districts, but others did next to nothing.

The Receiver for, and the District of Fair Prospect, which included Hartford, did exceptionally fine work. There was a reported list of 351 killed rats. Following is the result of Competition :

Mr. James McKenzie	Fair Prospect	90 rats	2nd Prize
,, Samuel Munroe	Black Rock	26 ,,	3rd ,,
,, David Gardner	Sherwood Forest	25 ,,	4th ,,
,, John Watson	Fair Prospect	23 ,,	Consolation Prizes of 1/- each.
,, George Deans	Panton's Hope	22 ,,	

The benefits derived from this Competition have been great. One man a winner of one of the prizes, made mention of a special cocao tree he had for years, which, as soon as the pods began to 'turn' would be surely cut by rats, but now it is pleasing to see the ripe pods hanging down.

The aforementioned number is only a list of the rats caught by traps, for dozens undoubtedly have got killed in the bushes by poison.

The Society thanked the Honourable Director of Agriculture, who kindly sent us a supply of poison, during the same period, for which we have been very grateful.

An idea is on foot to start another Competition on a large scale when we may be able to give away £2 in prizes.

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CITRUS FRUIT.

For the benefit of those who are purchasing Citrus Fruit we take the opportunity to remind them of the Law governing same, and so a copy of this Law is printed below.

LAW 11 of 1912.

A Law to prescribe a Measure to be used in the purchase of Citrus Fruit by Licensed Dealers.

(18th May, 1912.)

3. All Citrus Fruit sold by a measure to a Licensed Produce Dealer, shall be sold by the measure of the description and size named in the Schedule to this Law or such other Measure as the Governor upon the recommendation of the Jamaica Agricultural Society may from time to time prescribe, of the size and dimensions mentioned in the Schedule, and any Licensed Produce Dealer who shall when purchasing Citrus Fruit by measure purchase by a measure other than the measure prescribed by this Law shall be guilty of an offence and shall be liable on summary conviction before a Resident Magistrate or two Justices of the Peace to a penalty not exceeding Ten Pounds and in default of payment to imprisonment for any term not exceeding one month.

SCHEDULE.

1. *The Box.*—That is to say a box measuring on the inside two feet in length, one foot in breadth and one foot in depth and usually known as the Florida Standard Orange Box.

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HEDGES—WIRE FENCES.

The most popular fencing in North America is barbed wire, but although this is becoming more common in the United Kingdom it is not by any means common yet. The fields there are mostly divided from the road and from each other by growing hedges, mostly of hawthorn. These hedges are usually kept neatly trimmed and within bounds, and it is a pretty sight in the spring time to see miles of hedges all in blossom which perfume the air. The hawthorn has small thorns and if grown low and thick makes a good hedge and presents a barrier to all stock. The objection to a thick growing fence in agriculture is that it takes up room itself and the roots spread far and interfere with crops. The objections to barbed wire fencing is that it does not keep out small stock unless there are five or six wires and that it is dangerous to valuable stock, horses especially. Beasts run against it, they will try to get over or through it sometimes, and then they get their skin and flesh torn in ragged wounds difficult to cure, and if the barbs are rusty, as they usually

are, in a short time, these wounds are sometimes poisoned; unsightly marks are left which depreciate the value of horses. On the other hand barbed wire fencing does keep trespassers from easily getting into fields when plain wire would be no obstacle. Good plain wire makes a neat fence but is more expensive to buy and more of it must be used, that is 4 or 5 wires would not be more effective than 3 barbed wires.

In Jamaica there are the different circumstances of the large *owner with plenty of land and the small settler with a few acres.* In the penkeeping or cattle rearing parishes where white limestone rock crops out all about, and stone is plentiful, stone dykes form the general boundaries and dividing lines. These when well kept look neat and are lasting and keep horse stock and cattle of a quiet nature within bounds, and a "rider" or wire or two wires along the top keep sheep and stock of wilder nature like Indian cattle, within bounds. These stone dykes form a harbour for mongoose and rats, but that is no serious objection. They cannot be used however in the more fertile parts where stone is not to be found in quantities at hand.

Growing hedges can be formed here without great difficulty but to find a plant of hardy nature, that can be easily kept trimmed low, and that will keep stock within bounds is not easy because there are so many different conditions. In the mountains of Manchester a thorn was introduced and which was and is quite commonly grown, although not so much now for a hedge. It grows very quickly, bears a white blossom in which bees find nectar, and is now mostly grown for furnishing firewood. It needs little planting as it easily spreads. Some call it "Brazil Macca" or "Cassia Macca."—Botanical name "Mimosa Thyrsordea."

In many districts the common fibre plant Koratoe is used as a hedge and is good, for it keeps all stock within bounds, but it is of no great utility, except that locally, string and rope are plaited from the fibre. but it is not a strong fibre. But Koratoe is better than the common 'Finguin' which is so common along roadside fences and should simply be considered a nuisance. Cactus was formerly commonly used in Kingston and surrounding seaward parts but is going out of use. It was an effective fence to keep goats out of homesteads.

For all districts save the very wettest, where a hedge or fence is wanted, and we think even where land is limited, every holding should be enclosed and subdivided safely against stock getting in or out of any part, a good hedge of Sisal Hemp or Henequen is superior, more effective and more economical than barbed wire or stone, because nearly all small holders keep small stock like goats and pigs. No stock large or small can get in or our where such a hedge is kept properly regulated by allowing young plants only to come on to replace old ones which have poled. And many small settlers could save or earn a good bit by plaiting ropes from the fibre and thus keep the plants trimmed at the same time.

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Under the new Cuban Government, preparations are being made for a bill for the introduction of families from all parts of the world, excluding Chinese, Japanese, and Italians. Special inducements will be offered to Spanish immigrants, who are more easily assimilated than those from any other country.

LOSS OF LAND.

This short article follows up our article in the JOURNAL for October entitled "Do not part with your Land." It is written by Mr. A. P. Hanson, the Agricultural Instructor of St. Andrew and Eastern St. Thomas.

The belated rains usually expected in October seem to have arrived (November) and the loss of land sustained annually by cultivators is so obvious at this season of heavy rainfall that it may be easier now to convince the doubting ones than at any other time.

The loss which occurs through landslips is tremendous, and is in some districts a constant source of danger. The cultivation of trees, and the prevention of bush fires deserve attention and are steps towards the protection and encouragement of forest growths.

The writer proposes in this short article, however, to deal with the loss of cultivated land. From every sloping field along the roads, the water in the gullies, and the valleys, rushes to join the brimming rivers. These in their turn hurry on seaward, leaving behind on the level lands by their banks where they become more sluggish, stones, sand, trash, and the rich mud which produces the fertile alluvial soils. Given equal rainfall these lowlands produce an excellent grade of bananas in from six to twelve months earlier than the lands of the slopes above.

To account for the deposit of trash, mud, etc. left along the bed of the recently swollen streams, we must betake ourselves to the cultivated fields above its banks. They are washed and deprived of the fine surface soil, the vegetable mould and the recently weeded grass, etc. The labour of months is sometimes washed away in a single night. Yet all this loss can be prevented by the cutting of "block" trenches, called also "blind" trenches, or catch pits." The benefits to be derived from a well regulated system of block trenches are many, in addition to the conservation of soil, humus and fertility, the sub-soil long at rest is brought up to the surface; surplus water is sunk low, and carried off through underground channels; the loose soil acts as mulching and strengthens the roots of such plants as bananas, while the soil becomes ærated and sweetened; and waterways lying along the length of the cultivations are reclaimed.

The trenches need not be "fore and aft", that is continued across the entire breadth of the wide ridge, but may be cut half a chain apart, and in lengths of a few feet, each being 2 feet wide, and not deeper than 2 feet also. Avoid heaping the soil around such plants as cocoa and orange, however.

In open spaces between the trenches apply the system called *Bedding*. After each season's weeding mark out sections 8 feet long by 5 feet broad; or they may be made 8 feet square. Remove the soil to a depth of six inches. Fill in the grass and cover lightly. After three weedings the entire field will have been bedded, and the process gone through again.

A. P. HANSON.

COMMENTS.

The Half-yearly General Meeting falls on the third Thursday of January. These Half-yearly General Meetings have been increasing in interest of late years but there is still wanted a greater attendance of members and of representatives of Branches. And it should always be borne in mind that only matters of general agricultural importance should be brought forward for discussion as distinct from matters which are purely local, and only concern a district.

All subjects to be brought forward should be advised to the General Secretary at least a week before the Meeting.

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We have always felt that it is little use making recommendations in this JOURNAL, unless these are practical, and reasonable, and if any particular product or material is required, to see that this can be obtained. When years ago (1899 or so) we began to recommend the use of the best type of seed corn only, our readers at once asked, where can we get it? And we supplied it. Recommend the use of leguminous crops for green dressings and readers at once ask us for trial lots of seed. We have supplied many hundreds of pounds worth of Cow peas, etc., of late years. Recommend the increased use of garden vegetables, and readers asked for reliable seed. We stock these and now a good many merchants stock them, and there is a good trade in them, so that there is no difficulty in getting them. Plenty, however, have not yet taken to growing garden vegetables, and we still stock the seeds to make it easy for hesitating and doubtful people to get seeds. Recommend the use of a powder to kill caterpillers, and readers ask, where can we get it? We furnish it. Recommend the use of Formalin for flies, and readers say where can we get it? We stocked samples for trial, and asked our advertisers, Kinkeads, the Chemists in Kingston, to stock it. Urge constant warfare to be kept up against rats and readers ask, what are the best means to destroy them? We have tried various brands of Virus and almost all Poisons advertised, and we keep on hand what we have found to be efficient, "E.X.O. Rat Exterminator." Then we are again trying a Virus made for use in the tropics, "Tropical Ratin."

We do not in any way interfere with ordinary trade but on the contrary we introduce and encourage the use of products in which there is no trade or little trade, and we help to give confidence in the use of new, but likely to be useful, articles of trade in Agriculture. And after a time when there is a good demand, the trade goes through ordinary business channels if there is any profit in it. There is no profit in some lines, and they require expert knowledge and more watchfulness and trouble than merchants provide or can profitably take, and that is, the supply of certain lines of seed, like Seed Corn, Cow peas, Bengal Beans, etc.

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RATS.—The result of the Rat-Killing Competition carried through by the Fair Prospect Branch in Portland is an example of practical work.

We suggested that our Branches should take up some such practical work and this is one of the most useful crusades that can be carried out, i.e., a simultaneous attack on rats which are such destructive pests. Now we should like to see *all* the Branches in a Parish co-operate in a Rat-Killing Competition.

ADVICE.—We are glad to give any advice we can or be the means of getting information from reliable sources, but the trouble is now that some of our correspondents in their confidence or enthusiasm expect the Agricultural Society and all its works to be infallible.

"I did what you recommended to my milch goat,—she died."

"I planted the Jerusalem Peas according to the methods described in the JOURNAL. They are all dead."

"I expect you don't know a——about fowls; your powder did no good, nearly all the fowls that were sick died."

All my coconut trees look sick; the Instructor came to look at them and recommended drainage first and manure later, and now putting some wash in the tops. If I have to go to all that expense I might as well give up my coconuts. You ought to know what is wrong with them and how to cure them without having to bother so much with drains, and climbing up every one to put Bluestone wash in. It is impossible for me to manure them all. They are dying back in twos and threes now."

Such are the cheerful comments we sometimes receive.

Now in spite of medical aid people die, with their troubles not always diagnosed correctly when living. There are hundreds of diseases in the human race; there are as many among stock; humans, horses and cows die in spite of medical and veterinary skill, good nursing, the best of care, and a proper diet.

Therefore we must not expect that all troubles among the plants and trees, or stock, can be always correctly diagnosed and advice given that can never fail, or some elixirs supplied that will create new life. We suggest that descriptions of troubles are often vague, incomplete, inaccurate, and that when treatment or remedies are suggested they are not carried out in entirety.

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INDEX.—The Index to the Volume for 1913 will be printed separately and issued with January Journal.

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GUNS AND SMALL STOCK.—The Mahoe Hill and the Avocat Branches were in correspondence with us for some time, asking this Society's consideration on the question of reducing the License on guns from 8/- to 4/-

Their argument is that heavy loss is often caused through their cultivations being trespassed upon by small stock, such as goats and pigs, and they require to shoot these pests.

We know well the great damage that can be done in half an hour by a half grown goat kid getting into a patch of corn or peas or yams. The mother goat is generally tethered, but the young kids when they get half grown are considered old enough to be tethered, are allowed to wander.

Such an animal worth barely 4/-, may in half an hour's time do 20/- damage to a crop. We estimate that such damage was done in less time to a cultivation we saw the other day by a half grown goat.

Pigs are even worse offenders, as they get into cultivations and root up the crops. As in the case of the goats, the mother sows are generally tethered, but the half grown ones are at liberty to roam, and just before they are weaned, when the mother's milk is drying

up, they are very ravenous. When a half grown pig breaks into a yam cultivation, in a few minutes it can destroy pounds worth of yams. Yams are an expensive crop to plant. It is not much use to chase off goats or pigs because they can dodge through the cultivation, round and round about.

Some Branch Societies contend that the only remedy, the only way to get people to keep their animals in control, is to shoot those trespassing animals that the law allows to be shot. This is right enough, but is no reason why the comparatively moderate fee of 8/- per annum cannot be paid. It is not desirable to increase the number of guns in common use. As it happens, it is not the gun the license is paid for; the law grants the license for a man to possess a gun. Thus the license on guns should not be looked upon as a revenue measure, but more as a method of registration of owners, so that all the guns in the Island can be traced, and it should be a matter of consideration, whether it would not be more desirable to license the gun than the possessor. We think it desirable here, to repeat the Law.

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FIREARMS.—Section 13, Law 30 of 1867, reads as follows:

"Any Constable or Rural Constable may require the production of his license by any person carrying or using any firearms otherwise than on Public Service; and if such license is not produced, he may seize and convey the firearms to the next Court of Petty Sessions of the Justices, who in case of non-production of a license, and satisfactory evidence that the same had been obtained prior to the seizure, shall order that such firearms shall be detained for ten days, and then sold, unless earlier redeemed."

The license to keep and use firearms is a personal one, and shall not entitle any person not licensed to keep, carry, or use firearms, unless he be the servant of a person who is licensed, when he may carry or use the same in his master's service, but only within the limits of his master's property.

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Still *they come. What? Letters from men who get this* JOURNAL *and don't read it or if they do will not refer to it again for information they want.*

On page 26 of the September JOURNAL, we repeated information which we have often given before, about the keeping of corn safe from weevils. We have to store large quantities of seed in this office at times between seasons and cowpeas are particularly liable to attacks by weevils. We also use Carbon Bi-Sulphide regularly.

Really, the Agricultural JOURNAL is worth reading.

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KEEPING CORN.—"I have some corn put up in puncheons but even that won't I fear keep weevils off. I believe there is a preparation of Carbon that you have that will do so. The question is will it affect the corn and injure it for feeding my horses and fowls. If not will you send me sufficient to put into 12 puncheons and send directions to me. Some one told me it is explosive and only of use to preserve Seed Corn."

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PESTS.—We ask our readers to read the article by Mr. Cradwick in this JOURNAL on the subject of Pests and Diseases of Plants. The accounts of troubles that have poured in upon us in connection

with pests in gardens and in cultivated fields of nearly all crops, this year, have been actually more than in all the years of our experience here put together. This is not wholly because there have been more pests this year, although it does seem to have been a bad year for pests, but because our work is getting more organized, people are getting better educated as to the loss that can be caused by these pests, and so are getting more watchful, and know that they have this Society to write to, and the Department of Agriculture and a scientific staff there to refer to. We can guarantee that we could have kept an Entomologist one of the busiest men in the community this year, but we did not like to trouble the Microbiologist too much with the smaller matters (to him) of pests on vegetables and corn, etc., because most of them were not new to us, but some were; and the Microbiologist has had larger troubles to tackle in connection with bananas, coconuts and cocoa. Yet from what we read and from what we know, Jamaica seems to be troubled with pests less than most other countries, but if we do not look out, we will be troubled as much as, if not more than, any other place.

Mr. Cradwick's note of warning is therefore timely. We particularly refer readers to what he says about Canker in Cacao, because this has been brought home to us this year, as we have been travelling in different districts inspecting the work of the various Instructors. Taking the nearest parish to Kingston, the metropolis of Jamaica, where cocoa is grown, and that is, the valleys in Upper St. Andrew, we have reported that 50% of the cocoa trees of small settlers—there are yet no large plantations there in bearing —are dying out quickly. An active Agricultural Instructor who can by demonstration show the ravages of Canker to the growers and bring it home to them, who can show them how to deal with this and other troubles and get them to equip themselves with the proper tools to do so, can certainly prove in a short time that he is a very profitable investment.

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SPRAYING.—Almost every year some districts lose their crops by caterpillars. Of late years almost all field crops have suffered. Cotton escaped last year better than cassava or corn. Every blade of guinea grass is sometimes eaten down. The only remedy for this pest is the use of a spray pump or by dusting with dry powder such as Paris Green, on to the plants. This year pests have been particularly prevalent and apparently more varied. Cut worms and slugs, and beetles too, it is reported have been eating corn and vegetables.

While Paris Green is used in combination with lime 1 to 6 or so, to treat crops on a large scale, garden vegetables can be safe-guarded by the use of the powder we stock called "Slug Shot" sold at 6d. per lb.

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WOODLAND—BIRDS—PESTS.—Every holding over 5 acres should encourage a bit of woodland to grow, not merely bush, but carefully preserved trees that are or will be of use to the owner. This while being done chiefly for the sake of wood, timber and sticks for building and fencing, and for firewood (which in many places is becoming scarce) would also be useful in encouraging useful birds about the holding. Most people however are at sea as regards what

birds are beneficial and what prejudicial. Casual observation often leads to the greatest misconceptions, as is stated in an article on Birds in this issue. Frogs are not birds but will do to give an instance of misconception. Nine-tenths of those who plant corn believe that frogs eat their sprouting corn, whereas this most useful insect eater, simply finds the corn hole a convenient cool damp place to make his home and it also forms a nice trap for certain kinds of insects. which the frog gobbles up without leaving his lair. Frogs do not eat corn at all that we know of.

Again the Nightingale is now blamed for destroying young cotton plants when the likelihood is that the birds are after the cutworms which are after the plants. But altogether what man, even an Agricultural Instructor or ourselves, has time to observe bird life with the patience and persistence required to establish with certainty the exact habits of birds and beasts here. That requires the devotion of time by scientific men who have no prejudices as the cultivator assuredly has, and are only concerned with absolute facts proved by repeated observation and practical tests.

This is the work for an Entomologist and Ornithologist and the latter is quite as important in our estimation as the former. It would be all very well to let us have more precise information on the habits of insect pests and their connection with our economic crops, and tell us how we may destroy them with Paris Green, Arsenate of Lead and what not, but we want to know also what nature has to say about the subject and find out what birds, if any, prey upon the particular obnoxious insects.

(The article on "Birds" referred to has had to be held over until next issue.)

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Co-operation.—There is often a great lack of economy in the working of the medium size place through the entire lack of the co-operative spirit amongst neighbours. There is much capital sunk in stock, implements and vehicles which are only used occasionally, some of which would serve several neigbbours. We admit however that it is difficult to secure co-operation in almost the slightest degree. And so there is waste.

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Economy.—It struck us often that, for instance, men who are neighbours and only keep a few head of cows will each insist on keeping a bull for his own use which becomes an idle and often a vicious animal and might be made to work. Of course one bull could do for half a dozen if each would give and take a little. But if not, why shouldn't the bull be made to work in a plough, dray or waggon as well as a steer. If well broken, he would not be vicious long, and his breeding powers would not be impaired but improved. The Cubans use bulls all the time in preference to steers, and in parts of the United States even Dairy Bulls are put to work. Some bulls are put to work here in small cane mills but the practice is not common. A good deal of road work could be got out of a bull, many a hillside if not too steep could be cultivated with a plough by the aid of a bull.

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Trinidad and Jamaica.—We have received an interesting and useful small handbook entitled "Notes on Trinidad and Tobago," issued by the Department of Agriculture there. We note from it that there is an area of 1,754 square miles or 1,195,000 acres, that

382,500 are under cultivation, that the population is 330,993, and that ths export of produce etc. amounted in 1911 to £2,328,377. Of this amount the value of the Cocoa thus exported was more than half, amounting to £1,230,097.

Jamaica has a total area of 4,207¼ square miles equal to 2,692,578 acres; the population is 878,691, and the total amount of exports was in 1912-13 £2,239,447, of which bananas represented value for £1,241,187. Thus Trinidad per head exports far more than Jamaica.

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RUBBISH—MANURE.—People are told on the one hand not to burn their rubbish or trash as it will make good manure, and on the other hand not to allow trash to lie about in heaps as it will harbour insect pests; it is in such heaps that the housefly breeds. What is to be done? Keep a regular heap in the *shade* and under cover—a simple roof on four posts does—and carry all the rubbish and trash there. Flies won't breed in deep cool shade. But a few shovelfuls of dry earth should also be flung over the heap now and then and when manure is wanted for any crops, there will be a useful pile of it. Let no rubbish or excreta of animals lie in your yard.

Another thing often neglected; keep a box of dry earth in the closet and put a notice up that it should be used.

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AGRICULTURAL INSTUUCTORS.—A Special Course of lectures for the Agricultural Instructors and others who may desire to take advantage of the opportunity has been arranged to be held at the Farm School, Hope, beginning Monday 15th December and ending Saturday 20th December.

The Microbiologist will give a Course of Lectures and Demonstrations on diseases of the Banana and Coconut scheduled under the Infections Diseases of Plants Law, and the Government Veterinarian will deal with Anthrax, Black Leg, Tuberculosis and Farcy.

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TORONTO EXHIBITION.—The Canadian National Exhibition held at Toronto between 23rd August and 19th September exceeded in extent and attendance all the previous Exhibitions. Of the West India Section the Jamaica Court occupied a third of all the space. We had considerably more space tban last year to fill.—(and a third less money to fill it, and less than half the time to make our preparations). However our representative Mr. Cradwick and his coadjutor Mr. L. W. Clemens of the Canadian Travel Club who took charge of the Tourist Association advertising booth, both capably carried through the work, and it was reported on every side that our representation was a success. The cost of the Exhibition to the Government, viz, £200, with £30 from the subscriptions of Merchants who also subscribed to assist the Tourist Association representation, may be considered a very good investment. Mr. Cradwick made a very able and exhaustive report on the Exhibition which has been published in the Jamaica Gazette and reproduced in the Newspapers. It is noted that some 1,783 visitors to the Exhibition recorded their names as probably visitors to Jamaica. The nett valne of each visitor here to the Island cannot be less than £10. Suppose the effect of the Exhibition is that only 500 tourists come here who otherwise might not have known of Jamaica!

Mr. Cradwick has written a short article on this Exhibition which is printed in the Journal

THE BANANA FIG.—We publish below extracts from an article taken from the "Canadian Grocer" on the "Canadian National Exhibition," held in Toronto this year where in the Jamaica Court a fine exhibit of Banana Figs was made. As this product is attracting much attention here and elsewhere in the tropics it will be of interest to those who are engaged in the growing of bananas. The Banana Fig business is practically still in its experimental stages, and as soon as the product can be placed upon the market in a uniformly attractive and inviting manner, with keeping qualities assured, there is every indication that good business can be done.

"This Booth attracted its full share of attention, and had the unique distinction of having the genuine interest of its visitors. The very best evidence of its popularity is the fact that nearly 4,000 lbs. of "evaporated bananas" were retailed during the Exhibition.

"The "Evaporated Banana" or "Banana Fig" is a delicious, highly nutritious food, rich in proteins. carbohydrates and mineral matter—an important supplement to the world's food supply. It is prepared from fully matured bananas.

"The "Evaporated Banana" retains its natural colour. It is an excellent winter food—climate conditions do not affect it. "Evaporated Bananas" can be prepared in many ways, and always make a tasty dish."

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Specimens of corn plants, the leaves of which were attacked by some insect, having been sent to us, and submitted to the Microbiologist he reports that the attack was due to Leaf Hoppers. The Director of Agriculture advises spraying with Paranaph—1 lb. to 3 gallons of water.

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MALE PIMENTO TREE.—It is the general belief that there are male and female pimento trees. People talk often of "man" pimento and point out apparent differences in the leaves and blossom. Certainly a good many pimento trees do not bear although we have known so-called male trees made to bear. We asked Mr. Harris the Superintendent of Hope Gardens, who is acknowledged to be our best botanist his opinion and he writes as follows :—

"There is no such thing as a "male" pimento. I sent a complete set of flowering specimens from barren trees to Professor Urban, the recognised authority on the Order Myrtaceae, and they were found perfectly normal.

The flowers of Pimento are hermaphrodite.

The so-called "male" trees are barren specimens which are sometimes made to bear by hard pruning for two or three years in succession. This is often tried in the case of fruit trees that do not bear freely and usually with good results."

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GRAPEFRUIT AS A MEDICINE—A medical opinion widely quoted states : "The sharp stimulus of the grapefruit is the best thing to set the digestion in order for the day." Invalids find it the right thing to give tone to the system, and it is a sure preventive when partaken of freely for the enervation caused by climatic conditions. It possesses in a remarkable degree the virtues of quinine without producing any of its bad effects, and may be given with benefit in malarial fevers. For medicinal purposes the entire fruit may be cut up into slices upon which boiling water is poured, put into a pitcher and left to cool. A glass of this before meals and at bedtime will prove an excellent tonic.

It is also highly recommended as a great relief for bright's disease, rheumatism, malaria, and many other complaints, and working favourably on the kidneys more promptly than any other fruit acid.

STOCK NOTES.

DOCKED HORSES.—Some of the Farm papers have very strong articles against the practice of docking horses. One of the strongest articles is written by R. S. Timmis, Royal Canadian Dragoons, (formerly of the Ontario Veterinary College). We have never read stronger language on this subject. It is certainly a foolish practice to cut off a horse's tail.

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"KIDNEY TROUBLE".—Many a gelding is dosed for "kidney trouble", when the real cause of his condition is foul sheath.

Every horse should be cleaned twice each year and road horses more often. Warm water and castile soap should be used, and the work should be done very gently.

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FARCY.—There are to be seen on the roads donkeys and mules being worked with open and running farcy sores on their legs, and this without check.

Now it is probable, we think, that flies which at once attack all such sores, can carry infection to any other beast which happens to have even the slightest cut or abrasion of the skin. If it is thought to be a hardship that such beasts should not be used, and, if not in too bad condition, then a Law might be passed and strictly enforced – because it would be easy to observe—that all such sores must be dressed in such a manner that they would repel attacks by flies and would not appear so unsightly.

One of the simplest dressings known, and one to be obtained everywhere is a mixture of three parts common Castor Oil to one of Jeyes Fluid, or better still, as it lasts longer on the wound, one of Stockholm Tar to three parts Castor Oil.

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SALT.—A correspondent writes us that she cannot get any of her cows to touch salt and asks if they can be taught to like it.

Yes, they can, and it is good for them ; it is indeed necessary, but it is better given in the form of rock salt. If a lump of this is placed before the cows they will soon begin to lick it.

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PIGS.—There is a considerably waste in feeding whole corn to pigs where a mill for grinding the corn is not available. The pigs like it better when the corn is cracked. Each pig should have a handful of charcoal and a handful of wood ash each day and this is especially good for young pigs.

An experiment carried through with feeding pigs in confinement shows, that in giving charcoal and ashes the pigs made more use of the feed, grew better and much stronger, in particular, the bones of those young pigs receiving wood ash and charcoal were thicker and stronger.

A long, rangy sow is fitted by nature to care for more pigs than a short-chunky one.

Charcoal, and hardwood ashes, with a pinch of salt, make as fine a tonic for hogs as you can buy at the drug store, and a good deal cheaper too. This is especially good for worms in the stomach.

VALUE OF BANANA MEAL FOR PIGS.—These experiments were undertaken in Germany as it was thought that dried bananas could be placed on the market at a price which would bring them within reach of agriculturists for stock feeding. At the Halle station bananas of various origin were analysed, their digestibility for pigs ascertained, fattening experiments carried out, and their effect on the meat of pigs investigated. The experiments are summarised as follows:—

Banana meal is very rich in carbohydrates—mainly starch; the content of fibre and fat is small. The content of protein, is, however, not very large, so that, in order to utilise the carbohydrates to the fullest extent, the meal must be fed with foods rich in portein.

The content of ash is small—the two most important constituents being potash and phosphoric acid.

The *meal has a high digestibility.* Meal from peeled bananas was found more digestible than meal from unpeeled bananas, but there was not much difference. The fibre was found to have a high digestibili'y for pigs, in spite of the fact that the organs of these animals are not well fitted for digesting fibre.

The live-weight increase in fattening experiments confirmed the high digestibility of the meal from peeled bananas.

The carcasses of pigs fed on banana meal were found to contain less cellular tissue than those of pigs fed on dried potato flakes.

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CALF-REARING ON THE EMULSION SYSTEM.—In these experiments, which have been carried out for eight years, coconut-fat was used as a substitute for butter-fat. This substance contains 99 per cent. of pure fat and is the cheapest vegetable fat obtainable. The fat and skim-milk were mixed in the proportion of 35 grams of fat to a litre of milk (5½ oz. to 1 gal.) heated to 60° C. and passed through an emulsion drum. A milk containing 3½ per cent. of fat was thus obtained at a cost of 4½d. per gallon. For satisfactory results the milk must be made fresh each time.

It was found that calves could be reared much more economically on emulsion milk than on a mixture of whole and skim-milk, and that there was no difference in the final weight of calves reared according to these two systems.

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POULTRY NOTES.

From the middle of December on, eggs should be somewhat more plentiful than in October and November.

* * * *

The later hatched pullets (April and May) should all be laying now, both large and small breeds. Much depend upon climate and treatment.

We had some Minorca pullets hatched end of April and kept in confinement, in a hot dry climate, laying in October; while other crossbred pullets in a cool climate but wet, yet otherwise under apparently better conditions with a free run were only beginning to look like laying, in November. All pullets of Leghorn and Minorca blood should certainly lay by the time they are seven months old; those of the slower growing breeds like Plymouth Rocks, Orping-

tons, and Wyandottes usually take a month longer, and Indian Game pullets are not often laying before they are nine months old. It is not good to force pullets to lay too early ; they do not grow so big, and they lay smaller eggs than when they have time to mature.

Complaints come to us all the time, but more especially at this time of the year, that hens will not lay although well fed. and asking for the reasons, and how to make them lay. *Well* fed, generally mean *abundantly* fed, but not always *judiciously* fed.

The secret of getting fowls to lay is to keep them scraping and scratching. It will always be found that fowls kept in a yard where horses or mules are kept and where there are piles of manure, lay well all the time. Not only do they get plenty of grain, and that in a minute form, (having passed through the horses or mules) so that they get their fill slowly and by working for it, but they also get plenty of animal food ; the manure is a breeding place for insects of various kinds, and there are plenty of grubs hatched. We see many people trying to get hens to lay by giving them abundance of corn, and that whole corn flung down in the yard, the only result being to make the fowls fat and lazy, not conditions to get eggs from them. Fowls must get animal food, and with a manure heap, or even a heap of rubbish, where the ground corn or other grains should be scattered, or where they have a free run, and find heaps of leaves and trash to scrape among, they find animal food for themselves. Where fowls are kept confined it is worth while purchasing the clearings from stables to provide litter ; there is usually enough grains in the droppings of animals to give compensation for the cost of the stuff.

The wet weather prevailing over most parts, is sure to bring a crop of colds or roup among some of the half grown chickens, where these have been late hatched, and sometimes in the grown fowls. Put a small pinch of the crystals of Permanganate of Potash (as often before advised) in the drinking water and use some of the same kind of solution to wash out the nostrils and mouths of the birds attacked. Give some soft food to the fowls either morning or evening and in these short days, when the weather is often cold in the morning and wet in the afternoon, we prefer now to feed soft food in the evening, and grain in the morning, the idea being to keep the fowls working hard to get their food all the forenoon, and give them only a good cropful of soft food before they go to roost. Put a small pinch of pepper mustard or ginger for each hen in the soft food. A tablespoonful of either stimulant is enough for 20 large fowls and 25 of the smaller breeds.

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The selection of the male bird for next season should be made now if not before. Clear out all superfluous cocks ; those kept for the table should be put up separately.

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THE SPELLING OF COCONUT—Sir Everard im Thurn, speaking at the Royal Horticultural Society, said the nut now known as 'coconut' was similar to the face of a monkey, and so the Spanish word 'coco,' meaning a grin or grimace, was attached to it. When Dr. Johnson was writing his famous dictionery he had an article on the 'Coconut' but a careless proof-reader passed a mistake in the spelling of the word, the compositor having inserted an 'a' and the word appeared as 'cocoanut.' The spelling became general.

HOUSEHOLD NOTES.

Baked Bananas as a Dessert Dish.—In an enamelled dish placed lengthwise, thin slices of bananas, covering with a thick sprinkling of brown sugar dusted with a bit of cinnamon, add one-fourth teaspoonful of butter for each slice. Bake till the bananas are translucent, and syrup has formed from their juice and their sugar.

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Baked Bananas as a Vegetable.—Only perfectly ripe fruit should be used. The unpeeled fruit should be placed in an enamelled dish and baked just in time to be served hot; send to the table in the skin as hot as possible, adding a bit of butter, lemon or salt, as desired. This dish takes from 10 to 20 minutes in a hot oven. Do not allow fruit to remain in the skin long after being baked as the skin causes the fruit to become slightly acrid.

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Fish for frying should always be dried thoroughly and dredged thickly with flour before being brushed over with egg and bread crumbs. Tinned herrings, etc., which are already cooked can be varied in flavour and appearance by treating in the same way, frying only lightly.

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A Cup of Tea.—Doubtless many of our readers know how to make good tea, but we have known many good housekeepers that do not. First, put freshly drawn water into the kettle, and as soon as it boils pour into the teapot; if tin, it must be bright and clean, and rinse out. Next put a teaspoonful of tea for each person. Do not allow "one for the teapot," that makes it too strong, and strong tea makes people nervous and dyspeptic. About a cupful is enough at first, set it on the hot stove a minute, but do not let it boil. Shake the teapot to get out the strength of the tea, fill up with the boiling water, and you will have a cup of tea worth drinking.

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By placing a few lumps of loaf sugar in the oven nearest the fire when baking pastry, the top crust will cook a lovely brown.

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An excellent way to utilize small scraps of soap is to put them in baking powder tins or cocoa tins, and cover them. Then punch holes in both ends of the can. This is handy for washing dishes, as the soap cannot come in direct contact with them, and in this way every scrap of soap is used.

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If honey granulates or candies, it may be liquified by setting the vessel containing it in another vessel containing hot water; not too hot, or it will spoil the color and flavour, and honey contains the most delicate of all flavours—that of the flowers from which it was taken. It may take half a day or more to melt the ho ney.

COTTON REELS.—Do not fling away your empty cotton reels. When the thread is finished, the reels come in handy. In many houses nails can be seen on the walls and behind the doors for hanging clothes on. The nails are very unsightly and are apt to tear the clothes. The empty cotton reels can be put over the nails and thus make excellent pegs. They can also be used over the windows, screens and curtains.

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The best way to dust clothes is to beat them with a supple jack or any other kind of switch. This takes the dust out as well as off the clothes. A stiff clothes brush is the worst thing to use; it brushes *off* the dust certainly, but does not take out the dust on woollen clothes, and repeated brushing makes the cloth look shiny.

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SEASONABLE HINTS,

BANANAS. We regret that in our notes for last month on page 37 in connection with the pruning and planting of bananas, that 1914 was printed instead of 1915. Of course it is evident that ratoon suckers breast high now, could not be in time to fruit in the spring of 1914; and that bananas planted now could not fruit in the spring of 1914,; ratoons might, where there is very quick growth, come in this time next year.

In January it should be carefully considered whether the bananas are forward enough; and if not, thinning should take place where it can be done, that is, when two or more suckers are being grown of a size or near it. It is better to sacrifice one on the chance of pushing it on, than to have two, hopelesly late.

Read last month's hints.

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VEGETABLES. Keep planting a succession of seeds not to have all in at one time. A light mulch should be laid through all vegetables now and this will keep the soil from baking and save much watering if the weather becomes dry. Last month's notes apply.

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POTATOES. We still have Seed Potatoes arriving in December, January and February. Orders must be sent in a month ahead.

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COTTON. A good many blame the cotton seeds when they fail to get a good growth of young plants; but in nearly all cases the cause of the young seeds not germinating well, and the young plants not coming up strongly within a week, is that the seeds have been planted too deeply or covered too deeply. We found some cotton seeds on a piece with no less than 5 inches of earth over them. We covered 100 cotton seeds in a test box with one inch of soil and every seed grew.

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Nearly all melons and pumpkins brought into market are pulled from two to three weeks before being fit and so have not the flavour they ought to have. Few know exactly when to pick these fruits (or vegetables) from the vines. The vine close to the melon or pumpkin should not be green and succulent but be nearly dry and the melon or pumpkin should not require to be twisted off, but but should come off easily.

WATERING. When gardens, whether flower, vegetable, or both require watering, it is hard to get this done properly.. The usual fashion is to water a little every day, sometimes in the morning when, within an hour the moistening is absorbed by evaporation. Watering should take place in the evening when absorption by the soil can take place during the night. A mere sprinkling does more harm than good. It merely wets the surface. A good soaking is necessary and if the plants are all mulched, once or twice a week will be enough to water.

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BRANCH NOTES.

Cambridge—Woodford, (St. Andrew).—A special meeting was held on the 11th November, 1913, The President and others were keenly interested on certain communications laid before them, from the Stony Hill Branch, re its forthcoming Show. 1. It was then decided that this Branch would help in advertising the Show, and to do all it possibly can to send exhibits. 2. In order to show a practical interest in the forthcoming Show, the meeting begs to offer a contribution to the Show funds. This was handed in by the Treasurer to be sent. At this meeting Mr. D McGregor withdrew a letter he had some time ago sent to the Society. At this point the meeting adjourned.

(Sgd.) D. ADOLPHUS SMART, Secretary.

Seafield, (St. Catherine.)—The regular meeting was held in the Seafield School-room on the 28th October. Meeting was opened with prayer by the Rev. J. G Peterkin, President. Members present were :—H. L. Mossman, Esq., Agricultural Instructor for the Parish, thirteen members, E. C. Johnson, Secretary, and two visitors. The minutes of the last meeting were read and confirmed. Circulars from the "Parent Society" was also read, and as requested by the Secretary of the Jamaica Agricultural Society, was made for the most part, subject of discussion for the evening. The Instructor then started to deal seriatim on the subjects of praedial larceny, vagrancy, short-term prisoners, the flogging of prisoners, District Constables, and Authorized Persons. He pointed out the evils arising out of praedial larceny, taking care to distinguish between "praedial" and "common" larceny. He pointed out the annoyance arising from praedial thieves, and said that praedial thieves are encouraged by compromising with them when caught, on very many occasions. In the opinion of the Instructor, as well as the meeting, it was agreed that when a thief has been caught on several occasions, drastic measures should be taken. The Government might make penal settlements on Crown land where the thief may be kept for the space of two or three years, labouring; during which time, he is to be paid (1/6) *one and sixpence, a day, deducting his cost for keeping him there.* At the expiration of this term, a piece of land be given to him together with plants, and portion of the money in hand for him, so that he may be fairly started, and every now and then as it is found necessary, portion of the money be given him, till the amount in hand is exhausted. If he remains honest, at the end of five or seven years, paying his taxes, showing himself industrious, and a reformed man, in every capacity, a free title will be given him, but with the understanding, the day he steals again, and is tried, and upon being convicted, he forfeits his possession. The Instructor, President and members all agreed that flogging should be abolished as it has done no good in the past. This resolution was moved by Mr. A. S. Ross, seconded by Mr. B. Forrest, and unanimously adopted. Re Vagrancy; the Instructor said that upon careful and close examination, vagrancy is a direct stepping-stone to praedial larceny, He said, by travelling, he gains wide experiences, and finds for the most part that thefts begin at home, pointing out some of the impetuses given to the young people : such as parents carelessness in their mode of chatting and living, Very often they see their parents with things which

they know they had'nt before they went to bed in the night. Not seeing any trouble arising, they themselves, try to get things in this slack way. The Instructor pointed out that we did not want to fill the prisons, but that we want to stop the lad from becoming a thief. To do this, he said as soon as he is discovered loafing about shop places, or wantonly straggling about the district not under any proper protection, there should be a law to have him arrested and brought before the Court, upon his conviction, any planter, proprietor, large or small, may upon application' indenture him on the same principle as East-Indian Coolies. Re District Constables, it was unanimously agreed, after the Instructor's explanation, and some discussion among members, that their services be dispensed with and rural headmen be again employed at one pound a month. The subject of "Authorized Persons" next came up for discussion, when the Instructor carefully explained who are "authorized persons" and their duties. On the subject of "Short-Term Prisoners," instead of flogging or sending them to St. Catherine District Prison, it was agreed that, proper lock-ups be made at the several Police Stations of their districts. These upon conviction, be sent there. clad in the regular prison uniforms and be made to labour on the road, when by this a better class of road is sure to be secured throughout the Island. The following resolutions were then drawn up to be sent to the "Parent Society": That the members of the Seaford Branch of the Agricultural Society resolve, as per circular sent: (a) Flogging of prisoners not agreed to. (b) Vagrancy agreed to as per circular. (c) Short-Term Prisoners; manner of dealing with them as per circular, agreed to. (d) Rural headmen, instead of District Constables. Several applications were being made for the position of authorized persons *re* the Produce Protection Law. The Instructor and President all agreed that applications may be sent in to the Secretary, and that at the next regular meeting will be dealt with, when selections will be made, one for each of the following districts: Golden Grove, Top Hill and Springfield. After the Roll-call a vote of thanks was then moved by Mr. B. Forrest, seconded by Mr. A. S. Ross and unanimously agreed to. This in a few well-chosen remarks, was conveyed to the Instructor by the President The meeting was then brought to a close, with the Benediction.—CHARLES E. JOHNSON, Secretary.

Chesterfield, (St. Mary).—A very interesting meeting was held on the 18th November when there were fifteen members present. The President being absent Mr. C. G. Hunt presided. Minutes of the last meeting were confirmed as read. The Secretary read communications from the Secretary of the Show Committee at Stony Hill. The Branch having accepted the invitation to compete in the Show, the greater part of the evening was spent in dealing with the prize list. Several of the members, have decided to prepare exhibits, for some of the classes, and so the branch is determined to be well represented, and to take home many of the prizes. It was proposed to discuss the subjects of the growing of canes and banana, at the next meeting, with a view of finding out which is the more profitable of the two. Mr. Chas. T. Roberts, will lead for canes, and Mr. Hagues for bananas. Mr. Hardie was of opinion that if a cane factory could be established here, it would prove a great boon to the settlers, who are nearly all cane growers. Some of the other members also shared his views. The subject of Prædial Larceny came up for some discussion. Mr. Jacob Beccoo said that the 'Authorized Persons' of this Society were not sufficiently wide awake to their duties, whereupon he (Mr. E. Hunt) pointed out certain difficulties that confront him at every turn. The Secretary was instructed to write and invite Mr. Cradwick, Instructor, to attend the December meeting of the branch. Mr. Chas. Smith paid in his subscription towards the buying of the grind stone. The attendance was noted. The National Anthem was sung, and the meeting adjourned.—A. VIVIAN HAGUES, Secretary.

Bull Head, (Clarendon).—The regular meeting was held at Mt. Carmel on the 5th October. There were present S. A. Schleifer, Esq., Agricultural Instructor, the Secretary, and four members and several others. The President being unavoidably absent, Mr. E. Holness was asked to take the Chair. The minutes of the last meeting were read and confirmed. The Secretary read a

letter from the Parent Society *re* the question of Prædial Larceny. The subject evoked a warm discussion with the result that the following considerations were arrived at :—That, in the opinion of the Society, flogging is too inhuman, and that, instead of this unmerciful method, self-supprting Penal Farms be established, on Crown Lands, for thieves, on the third conviction, where they would be confined during the Governor's pleasure; and that hard labour thereat, be enforced by a judicions use of the lash, if necessary. 2. That Farms under Government supervision be established where loiterers could be indentured; and a strict vagrancy law be enacted. For Juveniles, Industrial Schools should be established. 3. That short term prisoners be kept in the local jails; and made to work on the roads. 4. That a return be made to the old system of having Rural Headmen; but the District Constables be retained, as at present. A free discussion about the Agricultural Show to be held on the 7th January, 1914 was next entered into and every member present pledged himself to do all he could to make the Show a thorough success. The meeting then rose.

T. S. ROBINSON, Secretary.

Ginger Ridge, (Clarendon).—A regular meeting was held here on 30th Oct., 1913, at 7 p.m. There were present the President, Mr. R. A. Thompson, the Secretary, Mr. J. Matthew Gregory and 17 other members. The meeting was called to order by the President. The Minutes of the last meeting were then read and confirmed. A circular from the Secretary of the Parent Society *re* Prædial Larceny was read, and a lengthy discussion followed on this most burning question, "What can be done to put a stop to, or to lessen Prædial Larceny?" as it is indeed sapping out the life of small agriculturists in these parts. Various views and opinions were expressed upon the subject, but nothing definite was arrived at, and the matter was put off to a future meeting. The committee, appointed at last meeting to consider applications from parties applying for the post of "Authorized Persons", reported favourably to the meeting on the applications of Messrs. Felix Anderson of Connor's and Robert Anderson of Cliffords, whom they consider to be fit and proper persons to be nominated as 'Authorized Persons'. Three other applications were put before the meeting but the voting on these was rather unsatisfactory. After a few minor matters were considered the meeting was adjourned.—J. MATTHEW GREGORY, Secretary.

Mt. Charles, (Lawrence Tavern.)—The regular meeting was held on the 30th October. There were present Rev. C. B. Berry, (Presiding) Mr. P. C. Francis, V.P., nine other members and the Secretary. The Minutes of the last meeting were read and confirmed. The meeting recorded the death of Mr. McFarlane with regret. He had lately joined the society. A letter was read from the Stony Hill Show Committee asking the society to co-operate in the holding of the Show. Members and others are preparing to attend and to take exhibits. Mr. Sylvester Coombs and Mr. Robert Hussey were elected members and paid their subscriptions. The meeting considered the matter of prædial thieves. Several suggestions were made but the meeting did not agree on any, and the matter was deferred. The next meeting will be held on the last Thursday of November, when the subject will be dealt with more fully.

W. R. SMELLIE, Secretary.

Whitehouse, (Westmoreland).—The November meeting came off on Tuesday November, 4, 1913, in King's School. Present R. C. Somerville, Esq. (Instructor) and twenty members besides visitors and children. The President was absent attending Circuit Court, and the V.P. was late. Mr. Somerville was voted to the chair. He opened the meeting with prayer, after which the Secretary read the Minutes and correspondence. The Minutes were confirmed. Mr. William Jamieson expressed his thanks for and appreciation of the first prize he won at the recent Corn Show and Competition, and told how he is deriving much benefit since he became a member of the society. Messrs. Cornelius Reid and Charles Williams of Culloden were elected and received as new members on the motion of Mr. J. Lawson—thus making fifty-five members in good standing in

this branch. An interesting debate followed, viz.: "Corn or Yam," which is more profitable to cultivate. Messrs. Gunning and Lettman championed "King Corn" in brilliant arguments, showing the usefulness and the various ways that corn can feed both man and beast, while good manure is got from the refuse, etc. In the absence of Messrs. Thompson and Clarke, the Secretary and Mr. Aaron Morgan spoke for yam and demonstrated how widely it is eaten and readily sold everywhere, and where proper methods are used in its cultivation it pays more than corn. Instructor Somerville supported yam and cited facts from the parish of Hanover to show the profit per acre of yam above corn. Other members spoke and when put to the house by the Vice-president (who came in late) yam won easily—only two members (the champions of corn) voting for corn. Instructor Somerville then gave a fine and instructive lecture on manure. He dwelt chiefly on green-crop, farm-yard, and compost manures—they being the easiest to procure and handle He strongly recommended fly-penning as an easy method within the reach of all small cultivators. He was listened to with rapt attention, and at the close members expressed how much more new knowledge they gained from his able lecture, and promised to put his ideas into practise. He was accorded a hearty vote of thanks. Vegetable seeds were at this stage sold to members who ordered them, and the Instructor recommended how they should be sown. He promised to lecture on Thrift at next meeting. The following notices of motion for next meeting were handed in to the Secretary and read, viz.:—(a) A penny bank in connection with the Branch (moved by Mr. Lettman.) (b) That the Government be approached *re* a telephone at the Post Office. (Moved by Mr. Lettman). (c) That a Pound for stocks be opened. (Moved by Mr. Gunning). (d) That an itinerant butchers license be enacted. (Moved by Mr. Cooke). (e) That more "Authorized Persons" be selected for the district. (Moved by Mr. Riddel.)

The Instructor will demonstrate in coffee pruning at 12 noon on the second December—next meeting day. Meeting closed with National Anthem.

M. HEWITT, Secretary.

Reach (Portland).—The regular monthly meeting was held in the Church of England Mission House on Tuesday, 4th November, 1913 at 3 p.m. There were present:—Messrs. E. Louraine, in the Chair, the Agricultural Instructor, the Secretary and 12 other members. The meeting opened by Prayer. The minutes of the previous meeting were read and confirmed. The Instructor came to this Branch at 10 a.m. for demonstrations. He visited two members fields, Messrs. E. Donegan and A. Lemoine along with the Secretary and six other members and has done remarkable well in pruning and taring. Then visited the meeting at 3 p.m. where he gave an interesting address on Coconuts. At the close of his address a vote of thanks was moved by Edward Donegan, and seconded by Geo. Buckly. The Secretary showed that much can be done through the Agricultural Society with which, the people must associate themselves by becoming members not only in name, but in attending meetings regularly, for districts that were very low down in the scale, have been brought forward through the Agricultural Society, and to-day are on the opposite end, he only begged for a good turn out of members at the next meeting, as the Instructor promised to be present. Mr. Geo. Buckly will give a lecture on Yams, at the next meeting. Business being over, the meeting adjourned till Tuesday, 2nd December, 1913.

E. LAMAN RICHARDS, Secretary.

Red Hills (Clarendon).—A meeting was held on Tuesday, 4th inst. The following recommendations for the suppression of prædial larceny were made:—1 That on the 3rd conviction thieves be retained during the Governor's pleasure on a penal farm, and that hard labour on such farm be enforced, by a judicious application of the lash if necessary. 2 That a strict vagrancy law be enacted and that *loiterers be indentured on a Government farm* established on Crown Lands. A settlement on Crown Lands could also be provided for these on the expiration of their term of indenture .3 That a return to the system of rural headman be made retaining at the same time the services of district constables and authorised

persons. The Instructor dealt with the subject of the Clarendon Agricultural Show to be held at Danks on January 7th, 1914, and urged the members to make it a success.—A. E. MILLS, Secretary.

Glengoffe (St. Catherine).—The monthly meeting was held in the Grateful Hill Schoolroom on the 4th November, 1913. There were present:—Alex. Carey, Esq., presiding, Rev. T. M. Sherlock, Vice-President, Mr. A. P. Hanson, Agricultural Instructor, Mr. and Mrs. Northover, and several others. There was not a large turn out of members as it was a rainy afternoon. After the reading and confirmation of the minutes, Mr. N. A. Alexander was proposed and accepted as a member. The correspondence was dealt with as follows—(1) Letter from Secretary of the Parent Society re Parochial Roads and the Committee of Management was instructed to draft a reply. (2) Letter from Secretary of the Parent Society suggesting to postpone Show. The President said he had called the Show Committee together and discussed it and the Committee recommended the adoption of the suggestion. The meeting adopted the recommendation of the Show Committee. (3) The Secretary of the Stony Hill Show Committee again wrote asking for co-operation. The Local Committee for assisting Stony Hill then gave its report which was amended and adopted. The Rev. Sherlock then moved that in view of the fact that our Show would be postponed that a grant not exceeding £4 be made to make a good Glengoffe representation at Stony Hill. This was adopted and the officers of the Branch were added to the Committee. The next Committee meeting to be held on Tuesday 19th. Letter from Mr. Egbert Wilson, re condition of roads, and asking the Society to use its influence with the Public Works Department in getting a culvert erected. Mr. Northover moved the following, which was adopted: In view of the injury done to Mr. Wilson's land from the situation of a crose drain on the Glengoffe Main Road which prevents the water from running off; as indicated in the letter, and as the condition existing, has been borne out by several members of the Society. Be it resolved that this meeting supports his requests and that an extract from the minutes be forwarded to the Hon. Director of Public Works asking that immediate steps be taken to relieve this grievance. (5) Circular re Prædial Larceny, was discussed and a separate reply sent to Secretary of the Parent Society. Mr. Cook moved that a Managing Committee be appointed this was done; the Committee to consist of the officers, and six members. The ten elected were : Messrs. Northover, Greenwood, Marshall, Gabay, Rennalls and Rev. C. A. Spencer. Mr. Hanson then spoke on the Prize Holding, Canker in Cacao, and Bud-rot disease in Coconut. The meeting then adjourned to Dec. 2, 1913.—THOS. E. COOTE, Secretary.

Pear Tree River, (St. Thomas). The monthly meeting was held on Wednesday evening, 5th November, 1913. Present—C. L. Isaacs, Esq., President, in the chair. S. Dobson Martin, Vice-President, Philip Hamilton, Treasurer, Messrs. E. Goldsmith, R. R. Soares and 9 other members. The President having called the meeting to order at 4 p.m. and announced the resignation of Mr. R. R. Soares to the office, this was seconded and unanimously carried. The minutes of last meeting were then read and confirmed. Correspondence from the Secretary of the Parent Society re "Prædial Larceny" was read and freely discussed The consensus of opinion was that flogging in public without imprisonment should be tried and that we should revert to the old system of having Paid Rural Headmen who should be vested with power to cope with the situation. VAGRANCY.—The members all agreed that all persons found loitering, especially the boys at the shops in the district, should be treated as Vagrants and on conviction be indentured to the Superintendent of Public Works for the time to work on the roads. They be located in the Police Station and taken out each morning to work. DOCTOR.—The need of a Doctor to pay periodical visit to this district was forcibly shown and it was resolved that the Parent Society be asked to bring the matter to the notice of the Government owing to the fact of the distance here between the Hordley and Morant Bay Hospitals, and in many instances after taking the walk, to get no admission. MEETINGS.—The Monthly meeting day was changed from Wednesday to the second Tuesday in every month, at 3 p.m.

Two new members were added to the list, E. Constantine Forbes, Esq. and Mrs. Adina Beckford, the meeting then adjourned.—R. R. SOARES, Secretary.

Stewart Town, (Trelawny).—The regular monthly meeting was held on Thursday evening, November 6th. The meeting was presided over by Mr. John Stockhausen, the President. Present were Rev. Jos. Thrift, E. Arnett, Esq., four members and the Secretary. The minutes of the previous meeting were read and confirmed. A letter from the Clerk of the Courts, Trelawny, in reply to one from the Secretary of the Branch asking for information as to when, and places in the parish, where. summonses are issued, was read. The President informed the meeting that the Clerk of the Courts had told him that the proper procedure would have been for the Secretary to write to Mr. Barclay who would refer the matter to the Colonial Secretary, who would in turn refer it to him. The President was of opinion that it was unnecessary to make the issuing of summonses easy for people, for if under present arrangements there is so much litigation, how much more if matters are made easier. He suggested the matter be laid in abeyance. Messrs. John Syms and James Campbell, Authorized Persons, gave their reports. The former had not as yet made any arrests, but the latter had caught during the month of October a girl who stole Mr. Chas. McFarlane's bananas. She was convicted and sentenced to five months' imprisonment. On the suggestion of the Instructor it was agreed, that a public meeting to deal with the question of prædial larceny be convened on the evening of November 19 at 6.30 o'clock. At this meeting also, the proposed Show to take place April 30, 1914, be spoken about, so as to get the co-operation of the community. As Mr. Arnett will be away for about three or four months judging in the Prize Holdings Competition, it was suggested that the Secretary of the Parent Society be requested to ask Mr. Harrison, the Instructor for St. James to render the Branch some assistance in the arrangements for the Show. Minor matters were disposed of and the meeting terminated.

JOSIAH JOHNSON, Hon. Secy.

Stewart Town, (Trelawny).—Prædial Larceny: At a Public Meeting held under the auspices of the Stewart Town Branch on Wednesday evening, November 19th, 1913, the Prædial Larceny question was fully discussed; and in accordance with the letter of the Secretary of the Parent Society dated September 27, 1913, asking for an expression of opinion by the Branches on the means for the suppression of the above evil, it was Resolved to offer the following suggestions. 1st—(a) That the Meeting is not in favour of Rural Headmen being reappointed, but of increasing the powers of Authorized Persons, so as to permit of their dealing with vagrants. (b) That Authorized Persons be also empowered to arrest prædial thieves detected in the act of stealing, or in the possession of agricultural produce actually known to have been stolen. (c) That Authorized Persons be further empowered to make an arrest on being called upon to do so by any owner of agricultural produce who has actually caught a thief in his provision ground. 2nd.—It was further suggested: That a premium be offered to those Authorized Persons in connection with the various Branches who shall have made not less than six arrests during the year: the premium to be as follows: 1st £3, 2nd £2. 3rd—It was also suggested: (a) That the District Prisons be re-opened, and that the prædial thieves upon a first and second conviction, be retained there, and utilized for Road and Sanitary work. (b) That Penal Settlements be established at convenient centres throughout the island to which prædial thieves, on a third conviction may be sentenced to serve for periods much longer than are at present provided by Law. (c) That Industrial Schools be established for the education and training of children at present growing up without any control.—JOSIAH JOHNSON, Secretary.

Upper Metcalfe, (St. Mary).—The monthy meeting was held as usual on the 6th November. In spite of the heavy shower of rain which fell at the hour of meeting, several members turned out. among whom were Rev. Hastings, V. P., Messrs. S. Smellie Bucchanan, Bell, McKoy, William Hunter, The Instructor and his Assistant Mr. Mossman and several others. The Rev. Hastings called the meeting to order and opened with prayer. He then on behalf of the Society, welcomed the Instructor who was away from the Island for some time, who replied suitably. Minutes of last meeting were read and confirmed. The Instructor then explained to the meeting His Excellency's suggestion, relative to the granting of licenses for purchasing cocoa. After discussion the meeting was unanimous in giving its approval of the same and asked Mr. Cradwick to circularize other Branch Societies, and enlist their sympathy and co-operation in favour of the suggestion, with a view to have the same enacted and enforced, as His Excellency's suggestion is well worth trying. At this pont the Chairman being suspicious about a banana in his field, had a whole tree which he had dug up by the root with its fruit, brought into the room The Instructor exercised the greatest patience in dissecting and examining every part of the plant, and allayed the fears of all present, when he announced that there seemed no cause for alarm as he did not find any symptoms of disease, sought for in the plant. Mr. Cradwick gave a very interesting and instructive lecture on the Toronto Exhibition. First explaining the objects of Exhibitions, he told the acreage of the ground covered by the Exhibition buildings, and described how he helped to advertise some of the Jamaica products. It was suggested and agreed to, that arrangements should be made for a Special Excursion Train to Kingston, and a Special Car to Hope Gardens to enable country members to visit the Government Farm School at Hope. It was agreed that the January meeting of this Society be held on the first Friday of the month, when the Instructor would attend and demonstrate in the cultivations of Messrs. Bell, Smellie and Hyde on the same day, and on the Saturday following. Meeting was brought to a close with the singing of the National Anthem.—W. T, EDWARDS, Secretary.

Gibraltar, (St. Anns).—The monthly meeting was held on the 16th. There were 34 members present, in addition, a very large gathering, (at the invitation of the Society) to consider the Praedial Larceny question, G. Arnett, Esq., Agricultural Instructor was also present. The Rev. Joseph Thrift by permission of the President, occupied the chair. He opened the meeting with prayer. The minutes of the last meeting were read and confirmed. Mr. R. S. Barnett an Authorized Person gave his report, which was favourable. The absence of Joshua Campbell the other Authorized Person was strongly commented on, the Instructor having pointed out that his presence is imperative. Mr. Thomas Campbell was nominated by Mr. R. S. Barnett seconded by Mr. Henry Sawyer as Authorized Persons for the Somerton district; and Mr. Benjamin Bainbridge for the Madras district was nominated by Mr. Armon Cunie and seconded by Mr. Chas. Christie. Both nominations were approved by the meeting. The Instructor explained at length the duties of "Authorized Persons," and read from the JOURNAL the articles for which they are to arrest. Correspondence were afterwards read and discussed. The report of the petition for a Post Office for Gibraltar was presented by the Secretary. Road matter was dealt with and it was decided that a requisition through the Instructor be made to the Hon. J. H. Allwood, M.L.C., to inspect the roads and to meet us in the near future. The burning question of Prædial Larceny was now discussed. After much discussion the following recommendations were made. 1. That the power of the "Authorized Persons" be extended to the Vagrancy Law, and that the Law be enforced by both District Constables and "Authorized Persons." 2. That instead of reverting to the old system of Rural Headmen, the pay of the Authorized Persons be increased, so that they may devote more time to the work. 3. That some system of restitution be adopted whereby the party from whom the articles are stolen, be paid four times its value. 4. That Short-term prisons be opened, and prisoners made to work on roads, and on the cultivations of planters—both large and small. 5. That Prison Farms be established in

different parts of the Island, and after the 3rd conviction prisoners be sent to these Farms for 5 years or more. After deducting the expenses, etc., incurred on each prisoner, the balance of money that he may earn to be saved for him, and at the end of this term he be established in Crown Lands with the money thus saved. 6. That education be compulsory. 7. That Industrial Homes be established, so that children who leave school could be taught different trades and Agriculture. A vote of thanks was accorded the Rev. gentleman for occupying the Chair so ably, having been moved by the Instructor, and seconded by the Secretary, who spoke of the keen interest he has already taken in the Branch. A vote of thanks for the Instructor was moved by the Secretary and seconded by Mr. R. S. Barnett. 5 new members were enrolled and the meeting terminated with the National Anthem.

J. B. MORRISON, Secretary.

Spanish Town (St. Catherine).—The general monthly meeting of the Spanish Town Branch of the Agricultural Society was held in rooms in Monk Street on the 6th November, 1913. Among those present were:—Messrs. Wm. Gentle, V. P., in the Chair, G. S. Wright, Treasurer, and U. N. Brown, Assistant Secretary and 5 others. The meeting was called to order by the Chairman, who extended a hearty welcome to Messrs. G. A. Black and F. Brunley, new members, the former returning thanks on his behalf and that of his friend for the kind welcome received. The Secretary read two letters which he had received from the General Secretary in Kingston, with reference to prædial larceny and the cleaning of water tables. On the motion of Mr. A. D. Mowatt (Snr.) seconded by Mr. A. D. Mowatt (Jnr.) it was decided to receive the communications and deal with them separately. The Parent Society, in the letter, pointed out the evil in allowing water tables to remain choked, as in many cases the water overflowed and inundated people's cultivations. Mr. Mowatt spoke on the subject from experience and pointed out the harm that could be done if these conditions were allowed to remain. As a result, a resolution was moved by the speaker, seconded by Mr. G. A. Robertson, pledging that all the members would assist in the abatement of this nuisance. The letter on prædial larceny dealt with the different suggestions put forth at the half-yearly meeting, as to the manner in which prædial thieves should be dealt with. Mr. G. A. Robertson moved that a special meeting be called to deal with this matter. Mr. A. D. Mowatt was then called upon to give a report on the work done at the half-yearly meeting, he being the representative of the Spanish Town Branch at this meeting. He spoke briefly on what was discussed with regard to the licensing of butchers on account of the risks householders took in purchasing meat from those itinerant vendors; also on native barks, and the evils accruing from the sale of a few cocoa pods by children, who were sent by their parents to sell them, in order to obtain money to buy their breakfast. He concluded by giving an account of what he did with reference to the irrigation water question (the reduction of the minimum from 5 cubic yards to 1). The meeting then adjourned.—U. N. BROWN, Assistant Secretary.

Mt. Industry, (St. Catherine).—A meeting was held on the 7th November, Mr. H. G. Richards the president presided. After the minutes of the last meeting were confirmed a letter from the Secretary of the Parent Society *re* "Pigs and Road" was presented to the meeting. The Secretary was directed to state in reply, "That this Branch is of opinion that when the Parochial Authorities required the inhabitants of the district to help with free labour to do what they are also taxed to do, they are asking of us too much." The authorities should post up in the districts warnings to people to keep their pigs off the road, and if these warnings are not heeded, the headmen on the roads be authorized to shoot the pigs found thereon. The purchase of cocoa in pods has now been introduced in this district. Since stealing of this product is great, the meeting is of opinion that the Agricultural Society should urge on the Government the abolition of the license for buying cocoa in pods. The meeting also thinks that more authorized persons are needed to cope with the sudden outbreak

of stealing in this district and recommends Mr. James V. Edwards as one. The Secretary was directed to call the attention of Mr. Barclay to the complaints of members of this Branch for not receiving their *Journals regularly*.

R. SIMEON ANGLIN.

Windward, (Hanover).—The regular meeting was held in the schoolroom, Bethel, on Friday the 7th November at 2 o'clock. There were present E. E. Melville Esq., J.P., President, in the chair; R. C. Somerville Esq., Agricultural Instructor, Messrs L. A. Smythe, Vice president, A. Shaw Samuels, Secretary and twenty-eight other members. The meeting opened in the usual manner, after which the minutes were read and confirmed. Matters arising out of the minutes were then dealt with. As regards the grindstone for the use of members of the Society, the Secretary explained that owing to his recent illness he was unable to make a personal selection as he intended, but he hoped to do so at an early date. Correspondence regarding the purchase of a pig for the Society was next dealt with. The Chairman said that he was not certain that the Large Black pig was the best kind to get, as he has had experience otherwise. After a little discussion it was decided that enquiries should be made, as to a short Breed of pigs and also the cost. The chairman said that owing to inevitable circumstances he was unable to represent the branch at the half-yearly meeting as was asked. The meeting expressed regret. Correspondence were next read *re* Dispensary at Hopewell and from the S.M.O. This gave place to some discussion. Mr. Melville said it was peculiar that no one knew of the visit of the D.M.O. to the district, and of the arrangements for the giving of medicine. The Secretary was instructed to write to the Government asking them what has been done in connection with dysentery in the district. The disease was still rampant. No one knew of the time of the Doctor's visits. Several people had gone to the place of visiting, and no doctor had come. One member said that some people had gone to the D.M.O. and because they had no money they received no treatment. Reference was made to the cacao plants sent out on the 30th October and it was reported that all had been distributed. Mr. R. C. Somerville then proposed Mr. Welds as a member of the society, which was seconded by Mr. A. Shaw Samuells and agreed. Mr. Theophilus Hall, an Authorized Person was also proposed as a member by Mr. A. S. Samuells and was agreed to. The Instructor informed the members that any of them who sent on to the Nursery could get plants free. The applications would have to be made through the Secretary of the Branch. *Correspondence.* A letter was read from the St. Paul's Branch Society *re* Prædial Larceny. This gave rise for a lengthy discussion. Arising out of the discussion it was the opinion of the members that though the convictions in the law courts might be the same as heretofore, as regards prædial larceny, yet this evil was on the increase. The duties of an Authorized Person were fully explained by the President. It was at this stage pointed out that Mr. Mowatt had been recommended as a District Constable for the Woodlands District, but that nothing further had been heard concerning the matter. It was moved that Mr. Mowatt be again recommended as a District Constable. A letter was also read from the Secretary of the Parent Society *re* Prædial Larceny, setting forth some suggestions which had been offered for combating this growing evil. The Secretary was instructed to reply to the Secretary St. Paul's Branch Society stating that this Branch is in sympathy with the letter sent, but are in correspondence with the Parent Society on the same matter. Capt. W. E. Rerrie entered at this stage. In discussing the suggestions set forth in the letter sent, the opinion of the meeting was taken upon the various suggestions. It resulted that the feeling of the meeting was against flogging, and the indenturing of vagrants. It was unanimous on the short-term imprisonment, and the re-establishing of the Rural Headmen system. The following resolution was passed by the meeting "That in the opinion of this Branch there should be a considerable increase of Authorised Persons in this District. A letter from the General Secretary regarding, buying of produce, and whether mahoe should be placed on the list of protective products or not, was read. It was pointed out that the Branch had already dealt with these matters.

The Agricultural Instructor then delivered a lecture on "Coconut Diseases." He spoke at length upon the various diseases of the coconut palm, and the various methods to be adopted in fighting these diseases. He also pointed out that in order for a successful fighting of the disease, co-operation on the part of members was greatly needed. A law was also read showing the steps taken in another British Colony for the fighting of the disease. A vote of thanks was moved by Mr. Smythe, seconded by Mr. A. Shaw Samuells, and unanimously agreed to. The question of a Water Supply for Hopewell was then brought up. It was pointed out that the Parochial Board had sent up the Superintendent to make a survey which had been done, and the matter has now to lay over until the steps taken by the Board are made known. The question of a local Show was then dealt with. It was moved by Mr. Somerville that the Parent Society be notified of the intention of the Branch to hold a Show. The appointment of a committee next took place. The following were appointed: Mr. E. E. Melville, Chairman, Mr. R. C. Somerville, Instructor. Rev. W. M. Christie Messrs. W. E. Rerrie, Bell, A. S. Samuells, G. E. Samuells, L. A. Smythe, E. Welds, R. A. Clarke, E. S. Mowatt, and J. S. Russell, with power to add to the number if necessary. The meeting then adjourned. —A. SHAW SAMUELLS, Secretary.

Trinityville, (St. Thomas).—A meeting was held on Friday the 7th November. Present: Messrs. B. Whitfield (President), eight members, one visitor and H. E. Wisdom (Secretary.) As the October meeting fell through for want of a quorum the minutes of the September meeting were read and confirmed. A verbal report of the Committee meeting held in October to discuss plans for the reception of the Governor, was also given and accepted. Mr. Edman was warmly congratulated for the very active part he took in the preparations. Mr. Edwards also came in for high praise for the way in which he pressed the need of a Continuation School on His Excellency. A report of Mr. Hanson's lecture on coconuts given at his visit in October was presented. The Secretary of the Parent Societies letter *re* Prædial Larceny was read. The Secretary was instructed to issue circulars to members and important residents, inviting them to a special meeting on the 21st inst. when the subject will be discussed. At the request of Messrs. Carr and Whitfield Mr. Edman kindly consented to give a lecture on Sanitation at the next regular meeting. Mr. Edman gave the following notice of motion:—Resolved that the following be substituted for Bye Law No. 1—That the monthly meetings of the Society shall be held on the first Friday of each month at 4 o'clock p.m. Five members to form a quorum. Two members paid their subscription and Mr. Buchanan's name was enrolled as a member. The meeting then adjourned.—H. E. WISDOM, Secretary.

Mt. Regale, (St. Mary).—The regular monthly meeting was held on the 7th November. The following were present Messrs. C. A. Robinson who presided, W. Cradwick, Instructor, nine members and the Secretary, and as visitors Messrs. E. L. Mossman and James McKenzie. Minutes of previous meeting were read and confirmed. Mr. D. Hannam's motion to obtain tools for the use of members was next considered, but decision deferred as financial position of branch is not known, the Treasurer being absent. The discussion on prædial larceny was re-introduced, and it was thought possible to put a stop to the evil if every man in an agricultural district would make himself responsible for the protection of the district, by becoming an authorized person, and a little more power be given to authorized persons to inspect the books of produce buyers. Mr. H. W. Clarke in whose field banana disease was found some months ago, said that no more diseased plants have been discovered. Mr. Cradwick explained that the Government is not paying for plants destroyed, but parties should unite to stamp out disease when found as within a short time great damage can be done if not stopped. Mr. E. L. Mossman expressed his pleasure at being present, and in a brief lecture led the members mentally over some of the grounds he had travelled and opened up to members what he had seen, referring specially to the cacao fields. He said that cacao was like children, responding readily to treatment. In an interesting address Mr. Cradwick referred to the Toronto

Exhibition he attended, the big way in which Jamaica was advertized, the expressions of wonder at the variety of things produced by the island, the superiority of certain fruits of Jamaica compared with like fruits of other places, the large increase of tourists booked for visit to our shores this coming season, etc. He reminded his hearers of the coming Small Holdings Competition, which is to come off in 1914, the necessity of early preparation and the importance of observing minute details. Next meeting fixed for first Friday in December.

B. THOS. ATKINSON, Secretary.

Mocho & Brixton Hill, (Clarendon).—The monthly meeting was held in the Brixton Hill Schoolroom on Friday the 7th November, 1913. Present J. Aug. Rhoden, Esq., President in the Chair; I. Rattigan, Esq. (Vice President), Rev. C. H. Baker and twelve other members including the Secretary. The meeting was opened with prayer as usual. The minutes of last meeting were read and confirmed. Arising out of the minutes the names of members who were appointed as Committee to purchase two Grind-stones, at a cost of 30s. for this branch were as follows:—Rev. C. H. Baker, Messrs. Geo. Gale, David S. Allison, I. Rattigan and the Secretary. After some discussions it was agreed that the cost of these stones to Four Paths Station by Rail, be not more than the 30s. aforesaid and that the Rev. Mr. Baker to have the same carried out. Subscriptions: This matter was considered at some length and members who were written to by way of threat by the Secretary, and have not responded in any way, were not to be allowed to get their JOURNALS till April 1914 and in the event of such members, up to that time not fulfilling their obligations they will be considered no longer members of the Society. Proposed by Rev. Mr. Baker, seconded by Mr. Rattigan. Mr. Chas. Lennon of Thompson Town, previously a member of the Smithville Branch was duly elected member of this branch being more convenient to him. Authorized Persons: Mr. Rhoden, President, moved, seconded by Mr. Bernard Francis that these Authorized Persons, viz.: David Dyer, Robert Lawrence and John Shorter Thomas be considered no longer such, having utterly failed to perform their duties as required by the law, but will be allowed to remain still as members, till the yearly meeting comes round. Correspondence: A letter of resignation from the President was read by the Secretary which the Rev. Mr. Baker at once asked to be withdrawn, this was seconded by Mr. Rattigan (V. P.) and was unanimously carried. Show: Re the Show to be held at Chapelton early in January of 1914, some subscriptions were received and fair promises by members to do their part at an early date. "Prædial Larceny": Responding to the Government as to the best course to suppress the abominable crime of stealing—this branch having discussed the matter at some length it was proposed by the Rev. Mr. Baker and unanimously carried:—That the thieves be put in Stocks as is done in some other countries, and that these Stocks be put at public places and districts, such as Four Paths, Mocho, May Pen, etc. Better still in their own districts where the crimes are committed. Produce: The President suggested, and earnestly asked members to consider well the sale of oranges, not to do away with the usual way of selling oranges in boxes, because of the recent introduction of the "Essential Oil" business which is now being got from it, as it is likely to do us much harm. He further advised the Secretary to seek, and find if possible the two Shears belonging to the Society. These Shears were lent sometime ago to members and no account is given of them up to the present time. No other business the meeting adjourned till Friday 5th December at Mocho.—S. AUG. FRANCIS Secretary.

Hanover (Hanover).—The fourth quarterly meeting was held on November 8th, at the Court House, Lucea, at 12.30 p.m., with Mr. J. Hartley Duff, M.A., President in the Chair. The meeting though not very large was a representative one, among those present being the Rev. J. M. McDonald, Messrs. R. C. Somerville, Agricultural Instructor, three members, the Secretary and others. Mr. Lloyd who became a member at the meeting took part in the discussion and among others, helped materially by giving information respecting similar matters in England, as were being dealt with at the meeting. Apologies for absence were

received from the Rev. D. A. Rothnie, M.A., the Hon. Geo. A. L. Sanftleben and Mr. E. Melville the last of whom sent his views on the question of prædial larceny. The minutes of the last quarterly meeting were read and confirmed. As arising out of the minutes the Secretary reported, that the men who were recommended as authorized persons, were appointed. It was decided that intended competitors in the forthcoming Prize Holdings Competition should give notice by the end of February their intention to compete. It was also decided that the Society should assist planters to secure growing coconuts, if those who require plants would communicate with the Secretary. The question of Prædial Larceny was now taken up and under-went a lengthy and thorough discussion, in which the President, the Agricultural Instructor, and several others took part. In introducing the subject the President gave an address and also the points contained in Mr. Melville's communication. Armed with the circular letter from the Jamaica Agricultural Society, and the September Journal, the meeting then tackled the question dealing seriatim, with the suggestions contained in the circular letter. The question of flogging came in for a good deal of consideration, and with only two dissentient votes the following resolution was passed: That in the opinion of this Branch flogging should be adopted, as a deterrent to praedial larceny; provided it be applied only after repeated offences: it should be applied after the second offence without imprisonment and after the third and subsequent offences with imprisonment. With regard to penal settlements the meeting thought that there should be a penal settlement in each county and a short term prison in the principal town of each parish for habitual criminals. It did not think, however, that a system of indenture would work satisfactorily. Mr. Lloyd thought that an industrial training ship established to go around the island might work well, especially for youthful offenders. The meeting was in thorough accord that there should be rural headmen receiving regular pay, in place of district constables; and that these headmen should exercise some control over the authorized persons of whom there should be a large number. In every case, it was felt, there should be compensation to the victim of prædial theft. The President referred to the suggestion he made at the last meeting, namely, that there should be a law requiring a seller of produce to be identified by some person known to the produce buyer, and it was decided to recommend that all produce buyers should be required, of their own knowledge or through persons known to them, to identify sellers of produce, and that the inspection of their books should be more frequent. As further suggestions from the Branch, the following were put forward: (1) that steps should be taken to educate public opinion through pictures, the pulpit, the platform, the press and the school; (2) that a person apprehended for the third time should be tried in the Circuit Court. These were moved by Messrs. Somerville and Lloyd respectively. The financial statement showing £7 2s. 6d. to the credit of the Society was presented by the treasurer and adopted. The meeting then adjourned..

New Road (Westmoreland)—Nov. 8, 1913. A special meeting was held in the schoolroom at 3 p.m. this evening for the purpose of discussing plans for the suppression of Prædial Larceny. There were present 21 members, a large number of others, and also seven ladies. The Secretary announced the object of the meeting and called Mr. Monaghan to the chair. In accepting the post of honour Mr. Monaghan expressed pleasure at presiding; he was pleased he said, to see so large a gathering of intelligent persons, all aiming towards the one great object and that the eradification of a dark sad blot on the otherwise fair escutcheon of our people, and hoped that as the result of that evening's meeting Praedial Larceny to the limbo of forgotten things would be relegated. The following resolutions were duly put to the meeting and adopted after having been thoroughly discussed. 1 That the cultivators should combine in forming among themselves vigilance societies for mutually helping each other to watch their fields against the attack of the praedial thief. Many who spoke on this resolution pointed out this was in vogue elsewhere, and with good results. 2. That to prevent the great crime of prædial larceny, recourse should be had to public whipping; a flag with appropriate devices being hoisted at the entrance to the whipping place (not

necessarily the police station, but any public place and the more public the place the better) together, with printed notices in large type and if possible photos advertising the prædial thief and the district from which he hails. 3. That in order to check vagrancy from which the ranks of the praedial thief are largely recruited there should be stricter vagrancy laws enacted, those of a suitable age to be bound as apprentices. That there should also be a return to the old custom of employing this class of offenders in cleaning the streets of the towns and villages. 4. That prisons with prison farms attached should be established in every parish, the prædial thief being made to grow food crops for his support, rather than as it is at present, faring at the expense of his honest brother. 5. That there should be a return to the old custom of employing Rural Headman, as the present District Constable regime, after a fair trial had been found wanting. A hearty vote of thanks was tendered to the Chairman on the motion of Mr. J. H. Cooper, seconded by Mr. J. H. Price, to which he replied suitably. The Benediction was pronounced and the meeting adjourned.—

Fair Prospect, (Portland).—The regular meeting came off on Saturday Nov. 8th 1913. There were present thirteen members and a visitor. Among the members were the President, Vice President, Treasurer and Secretary. After prayer minutes of 11th October and of the Public meeting of 16th October, were both read and confirmed. As arising out of minutes, the Secretary stated that he had forwarded to the Agricultural Society recommendations re "Prædial Larceny". The question of the Penny Bank was another matter from minutes. A strongly worded resolution was passed to the effect that all the Penny Savings Bank Books be collected during the month of December, and be retained so as to enable the Auditors to check the Treasurer's books. The attention of the meeting was drawn to the fact, that it is now many months since the promise of making stepping stones over the Horse River at Hartford was given, and up to this nothing practically has been done, and the need for such stepping stones is still felt. The Secretary was instructed to send a reminder to the Parochial authorities on the subject. The Treasurer presented receipt for affiliation fee paid. The Secretary thought members of the Society were not sufficiently interchanging ideas on Agricultural matters. He did not want to think it owing from selfishness, neither did he want to think any one member would be so conceited as to think he knows everything. Attention was also drawn, and a remedy suggested, to one or two matters directly connected with the Branch, which hitherto were overlooked. It was decided to hold a Debate and Social amongst the members of the Branch and Sub Branch on the night of the 24th December. Subject for debate "Yams vs Bananas." A committee to arrange matters in connection with the Social, was formed of which J. W. Munroe is Chairman. Voluntary subscriptions of about three dollars were offered. The Sub-Branch, too, is to be approached for a donation. It was agreed that, notice be sent to every 'Authorized Person' connected to the Branch, to be present at next monthly meeting, to give his experience and receive such information as may be given by those better informed. The "tool committee" is to prepare a report on tools for next meeting. The Secretary pointed out that members of this Branch have for years been agitating for a Loan Bank, and now that long felt want was met in the 'Long Bay People's Co-operative Bank,' centrally situated, and which he hoped members would more heartily support.

W. Zechariah Buckley, Secy.

On the 17th the Windsor Forest Sub Branch which is connected to the Fair Prospect Branch held its regular monthly meeting. The President, Mr. J. Panton, was in the chair and thirteen members were present:—C. A. Smith, (Secy). W. A. Ellison, from (F. Prospect Branch,) W. A. Chambers, (Secy. Rural Hill Branch) and W. Z. Buckley, Secy., (F. Prospect Branch.) There was also a fine attendance of lady visitors. The preliminaries of the meeting having been gone through the President spoke of the miserable ninepence per bunch for bananas which is now being paid, and encouraged the members to take shares in the Banana Fig Co., and then called on Mr. Ellison to speak on the subject. Mr. Ellison encouraged the people to take up shares, that he himself had taken up

several shares, then showed the advisability of taking up a sufficient number of shares which would enable us to have a Factory started in our own district, where our fruit would be sold on the spot and employment given to some of our young people; and concluded by making mention of and encouraging those who had not yet joined to join the "Long Bay People's Co-operative Bank Ltd." Mr. Chambers who had for the first time visited the Society, gave a very helpful and interesting address. He demonstrated to the audience the usefulness of co-operation and urged it to take more interest in agriculture—agriculture which does not merely mean the planting of yams and cocoes, but agriculture on scientific and improved lines. He urged a change of the old methods of cultivation, gave some of his personal experience in his own field, and closed up by inviting the members to support the "L.B.P.C. Bank, Ltd." Mr. Buckley said the nature of his visit was of a general character. He had promised to occasionally visit them, and as their Secretary requested him to attend that meeting he had put aside other engagements, and was happy to serve them. One or two matters respecting the Branch and the Sub Branch were talked of, and then he gave a practical illustration of co-operation and sticking to a thing, in order to make it a success, at the same time doing one's very best. In reply to a question from the Secretary the speaker said that as Secretary of the Branch to which this Sub Branch is connected, he would always think it a pleasurable duty to do anything he reasonably could, for the furtherance of the Sub Branch. Being requested by the President to speak on the Long Bay People's Co-operation Bank he said that as Secretary of that Society or Bank, he was in a position to tell them that the day many of them had longed for was not very distant. He then briefly outlined the object of the Bank, invited their co-operation, and impressed the advisability of at once taking shares. Of the Banana Fig Co. he said he had nothing to say, but of course reason demands that we should scatter our eggs as best we reasonably can. A motion by Messrs. K. Burke and J. Smith was passed *re* "The buying of a Grind Stone for the use of members of the Society." The meeting came to a close by the singing of the doxology.

W. ZECHARIAH BUCKLEY, Secretary.

Prospect, (Clarendon).—The monthly meeting was held on the 10th November. Present, the Agricultural Instructor and eighteen members. The minutes were read and confirmed. The Rev. E. A. Bell proposed Mr. Henry Townsend and Miss Ellen Townsend as members. The President also proposed Mr. Thomas Rennals. They were accepted, Matters arising out of the minutes, re the purchase of a pig was discussed. It was agreed to leave the matter with the Instructor to seek up the pig and report at next meeting. A letter re Praedial Larceny was read and wildly discussed. The members were all opposed to flogging as a deterrent. After several suggestions were thrown out, the following resolution. moved by the Rev. E. A. Bell, seconded by Mr. J. Henry, was unanimously agreed to. Resolved:—That on the third conviction the praedial thief be made to work on a penal farm of the Government, at the Governor's pleasure. Should his conduct be satisfactory, the government be empowered to give him a conditional title for a certain portion of Crown lands, and some finanicial help to cultivate and improve same, after a number of years, as may be agreed on by the government, he shall be regarded as the owner of the land so long as his conduct continues satisfactory, provided, nevertheless that on stealing again, the lands be forfeited, and the delinquent on conviction, kept in prison for the balance of his life. And that a strict vagrancy law be enacted, and all vagrants be indentured for a number of years on a government farm. Also that rural Headmen be again employed in the various districts at 20s. to 30s. per month. After some instruction by the Instructor about the on coming Show, the meeting adjourned.

LYDA A. CLARKE, Secretary.

Brandon Hill, (Clarendon).—On the 24th inst. a meeting was held. There were present Mr. Geo. Bailey V. P., S. A. Schleifer, Esq. Agricultural Instructor, the Secretary and over 30 members of the Society and visitors. The President, Mr. L. D. Small being absent, Mr. Bailey the Vice President took the

chair. The minutes of the last meeting were read, corrected and confirmed. The Secretary was asked to send up immediately after the meeting the gist of the minutes for insertion in the JOURNAL of Agriculture. Several of the members paid in their subscription for the Show Fund. It was agreed that not less than two guineas be subscribed by the Society for the Show to be held at the Craig Recreation Ground on the 7th January next. The following members were asked to act as a committee to collect the money, as well as to encourage the small settlers to get up as many exhibits for the forthcoming Show :—Messrs. L. D. Small, J. N. Simpson, R. S. Christian—Brandon Hill, Geo. Bailey, Top Hill, C. H. Beckford, Santa Maria and Peters Hill. The Instructor gave many useful hints and suggestions as to how each exhibitor could get as many as 20 exhibits. He also encouraged the members to spare no pains in getting the entire district to go down on the day of the Show and to take his exhibits, so that we may have the biggest Show yet held in Jamaica. Sixteen Branch Societies will be joining in this Show, so it ought to be the biggest Show yet held. A committee formed at last meeting to make arrangements for the Agricultural Concert to be held on the night of the 22nd December, next gave in its report. Several ladies and gentlemen were invited to take part and the price was reduced from 1s. for adults and 6d. for children to exactly half those sums. The Instructor promised to preside. Mr. Bailey spoke in glowing terms of the improvements in agriculture of late, in Upper Clarendon, especially in the cacao industry as over 20,000 cacao plants taken from the nursery at Danks have been taken away and planted, by the small settlers. A vote of thanks was accorded the Instructor.—JAS. N. SIMPSON, Secretary.

Darliston, (Westmoreland).—The monthly meeting was held in the Enfield Schoolroom on Friday, 14th November. There were present Messrs. J. W. Mennell, President, sixteen members, R. C. Somerville, Instructor, three ladies and the Secretary. The minutes of the last meeting were read and confirmed. As arising out of the minutes Mr. Philip said he had taken over the pig and during his possession of four weeks it had gained 19 pounds. The Secretary said he got the vegetable seeds ordered from the Agricultural Society and was disposing of them The Secretary proposed Fred. Blake, for the appointment as an Authorized Person for the Enfield District. Seconded by Mr. James Harvey. It was unanimously agreed to recommend Frederick Blake for the appointment of Authorized Person for the Enfield District, vice Richard Hibbert deceased. Read copy of a letter dated 4/11/13 from the Colonial Secretary sent to the Branch through the Secretary of the Parent Society in reply to one sent from this Branch. It was agreed that a market show be held at Enfield Pen provided the consent of the Hon. J. R. Williams be obtained for its use and the following were appointed a committee to arrange details and time of holding the Show. Messrs. Somerville, Whyte, Stewart, Harvey, Spence, Philip, the Treasurer and Secretary with powers to add to their number. Four to be a quorum. The committee to report at next meeting. Vice President Stewart to be Chairman. The Instructor took the names of those who would take cacao plants which are now at Darliston near the collector of taxes office. The Instructor described the best methods of planting the cacao plants. It was requested that those who obtain plants shall report on the progress of their growth three months hence, Meeting adjourned to Friday 12th December, at the usual place and time.—H. J. HEDLEY, Secretary.

Belfield (St Mary).—A meeting was held in the Belfield schoolroom on the 12th instant, there being present :—Messrs. H. E. Vernon, presiding, C. A. Monaghan, Vice-President, M. H. Helps, Treasurer, ten members and many visitors. The minutes of the last meeting were read and confirmed. Mr. I. Hall was on the motion of Mr. R. Oliver, elected a member of the Society. Eleven members paid in their subscriptions. The President nominated Mr. S. L. N. McGann for the position of Secretary, in succession to Mr. S. E. Haughton. Mr. McGann was unanimously elected and returned thanks. The President then brought to the notice of the Society the proposed amendments to the Produce

Protection Law. He said that as their representative, at the Conference held in Kingston some time ago to make suggestions to the Government as to the directions in which the law should be amended, he strongly opposed the suggestion to have buying centres, as not only did he consider it an infringement on their rights, but he was certain that the object in view of the money collected, should be spent in strengthening the Police Force. He invited the views of other members. Mr. C. A. Monaghan throught the creation of buying centres objectionable; produce, however, should only be bought on main and parochial roads. Mr. Oliver was opposed to buying centres. If the law was complied with in other respects, he said a man should be allowed to buy produce anywhere ; every grower should be provided with a permit without which he could not sell his produce. Other members spoke in opposition to the proposed buying centres and the following resolution was seconded and unanimously carried. Resolved. "That the Belfield branch views with disfavour the idea of buying centres, and respectfully urges that the Prodnce Protection Law should be enforced, and that in order to do so at least a fair proportion of the moneys collected under the law should be applied in strengthening the Police Force, and that men from the Force with special ability should be appointed to superintend the various licenses; and further that no produce should be bought except on premises adjacent to main or parochial roads; and that a copy of this resolution should be sent to the Parent Society, and to His Excellency the Governor. The matter of the Penny Bank was discussed and it was decided to let it lie over until the next meeting. Mr. R. Oliver will move at the next meeting that "bananas are more remunerative than cacoa," while Mr. Helps will oppose. The debate promises to be lively, and a large number of members are expected to be present.

Marlborough (St. Mary).—The regular monthly meeting was held in the schoolroom on Thursday, 13th November, 1913, at 5 p.m. Present :—Messrs. A. J. Duncan, President, Z. French, Vice-President, the Secretary and eleven other members. The minutes of the previous meeting were read and confirmed. Arising out of the minutes the matter *re* the formation of a Penny Bank, was brought up and discussed. The Secretary gave information *re* cost of Pass and Account Books. Mr. French suggested that the matter be referred to the Managing Committee, with a view of arranging to meet the cost of the materials required. On the motion of Mr. J. A. Dixon it was agreed that the matter be dealt with by the meeting After some discussion it was agreed that each member, (except the ladies, who promised to give 3d.) give 6d. to defray cost of Books required : with the understanding that they get their Pass Books free. Correspondence.—The Secretary read letter from Mr. Cradwick regretting his inability to attend the meeting, and suggested Saturday 22nd as the only date on which he could attend. The Secretary informed the meeting that on suggesting the matter to members he had seen, he was convinced that the proposed date was most unsuitable, and so he had written Mr. Cradwick informing him that as the date suggested being unsuitable, the yearly meeting would be postponed till December, when he could be present The circular from the Parent Society dealing with various suggestions *re* Prædial Thieves, Vagrants, and the revival of the old system of Rural Constables, in place of the present system of District Constables, was read. This provoked a very lengthy and heated discussion. Varied were the suggestions put forward by members. The matter being one of paramount importance, it was deferred until next meeting, as it was too late to have all the items discussed. The Treasurer then presented his report, which showed a balance in hand of 5s. 2½d, Five members handed in their subscriptions for the year 1913-14. The meeting then adjourned after the singing of the National Anthem.—R. SAML. FINLAYSON, Secretary.

St. John (St. Catherine).—A regular meeting of this Branch was held at Kitson Town on the 13th instant at 6 p.m. Among those present were Messrs. D. V. Anderson, (President) E. P. Wilson (Vice-President) S. A. Banton (Secretary) W. Wilson and D. Francis. The meeting was opened with prayer by the President. After the minutes were read and confirmed the Secretary was asked

for the Instructor. The Secretary replied that he was not in a position to say where Mr. Mossman was. He had however heard from him recently, and he was such a punctual gentleman that he was almost certain, that having rains up in the hills had prevented his getting there. A letter was read from Mr. Charles Grant complaining of the bad condition of the No. 29 Parochial Road in this neighbourhood. The contents were lengthily discussed. Nearly all present who had recently travelled over this road, said that it was a road over which so many drays had to pass, to say nothing of pedestrians, that it ought to be looked after more. On the motion of the President, seconded by Mr. Wilson, the following resolution was adopted: That this meeting begs to call the attention of the Commissioner to the state of the No. 29 Parochial Road of lower St. Johns. That this said road is almost in some places overgrown with shrubs, and considering the number of vehicles in this neighbourhood which pass over it continually, this meeting respectfully suggests that more attention be given to it. A letter from the Parent Society which was the outcome of correspondence between the Clerk of the Parochial Board and the Secretary was read and tabled. The matter therein is receiving attention. Mr. Banton said that he desired at this stage to say that Kitson Town on a whole has got much to be thankful to the Commissioner for at present. This Society had made representations time after time to the authorities, in order that our deficient water supply might be made sufficient. He was pleased to be able to say what the meeting already knew, that another tank had been made near to the former one. The new tank in his opinion is better than the old one. The catchment near has been considerably increased. The Superintendent of Roads and Works tried his best to make the work a success, and I think he has succeeded admirably. No reasonable being could have expected that gentleman to do better than he had done in regard to these tanks. The Commissioner has also done much for us, whereby I feel sure that I am voicing the sentiment of all when *I* say that we are thankful to him. I beg to move the following resolution and if it be unanimously carried then I would suggest that a copy be forward through the Clerk of the Board to the Commissioner. That the members of the Lower St. John's Branch beg to place on record their thanks to the authorities for making adequate provision for supplyng this neighbourhood with water. That this Society will be ever grateful for the additional tank and extensive catchment area. The above was seconded by Mr. Wilson and was unanimously carried. The members decided to have a picnic on New Year's Day to augment the funds of this Branch. Note, a strong North wind is blowing. The corn planted in the school garden for competition has suffered much. Nice and refreshing showers had fallen. The outlook though fair would have been better if there were more available lands for cultivation.

S. A. BANTON, Secretary.

Mizpah, Manchester—A special meeting was held on Friday, the 14th of November, in the church-room. There were present Rev. F. Weiss, Chairman, ten other members, and two visitors. The minutes of the last meeting were read by the Assistant Secretary, and confirmed. Arising out of the minutes, *re* telephone communication between Walderston and Shooters' Hill, the President said that the Postmaster General had promised to give the matter his careful consideration. Mr. A. Walder, J.P., V. P. then gave a lecture on "coffee curing" which was the chief object for this special meeting. Coffee curing—First of all there must be a good pulper, sufficient barbecue space, and a good water supply. Only cherry ripe berries should be picked. The skin of yellow berries do not yield to the pulper. Berries get bruised, and bruised ones rot readily. They should be pulped the same day on which they are picked, as they are easily affected by the syrupy juice. The same setting of a pulper will not do for berries that have been picked 2 or 3 days before. Enough water should be poured on after they have been pulped and they should be left to ferment for about 30 hours. When this process is complete, the water will be a thick syrup. Light ones should be skimmed off as these are of an inferior grade as regards weight and size. Coffee should be in the sun for 4 to 5 days before it is put up. Failing this, mould will accumulate, bruised berries will rot and this spells

"loss." Dry parchment coffee, thoroughly, but slowly before milling. This slow drying is what makes the Blue Mountain coffee heavier than. Manchester coffee. There coffee is put in the sun from 10-11 o clock, and taken up from 1-2 o'clock. Not the least drop of water should be allowed to get on coffee in the drying; this robs it of its rich dark colour. Several members offered comments on the subject. One said that the system of coffee buying is responsible for defective "curing," as the same price is given for coffee well cured, as for coffee badly cured, and both kinds are put in the same bag or barrel. The President said that co-operation would be a check on this system. A hearty vote of thanks was accorded Mr. Walder, moved by the President and seconded by Mr. W. Baker. The meeting adjourned at 4.20 p.m.—Assistant Secretary.

Waterloo, (St. Catherine).—The monthly meeting was held on Tuesday 18th November, 1913. Present T. Huggins, President; H. L. Mossman, Instructor; D. C. Thompson, Secretary; S. Laing, Assistant Secretary and fourteen members. Minutes of the last meeting read and confirmed. Matters arising from Minutes discussed. Letters from Mr. Barclay—*re* Prædial Larceny—its cause and remedy was read and keenly dealt with; also letter from Parochial Board. The Secretary was instructed to write the General Secretary informing him that this Society was in sympathy with the latter, and shall adhere to the plans suggested—as soon as the Commissioner grants our petition—in the shape of improvement to roads which at present do not exist. Rules were framed for the Grindstone. It is intended only for members who are in good standing. Mr. Mossman promised to make the Society a present of a ram goat. The members have decided to purchase from Parent Society a young boar. The National Anthem closed the meeting.—D. C. THOMPSON, Secretary.

Hampstead (St. Mary).—The regular monthly meeting was held in the schoolroom on the 20th Nov., 1913. Rev. I. N. D. Gordon, President, W. C. Gauntlett, Esq., and 23 other members were present. After the usual preliminaries the Secretary read several letters dealing with some important matters which were discussed. It was decided that this Branch take part in the proposed Parish Show 1914, and the Secretary was interested to inform Mr. Cradwick, Instructor, of this. With regard to the complaint about Bahama grass being deposited by road men in fields near the road, the Assistant Superintendent, Mr. L. A. Gayle, promised to right the matter. In the absence of Mr. Cradwick, Mr. Gauntlett gave a very practical and helpful address on stock-rearing in connection with Agriculture and on the wisdom of growing minor crops. He said despite the very rich banana lands of St. Mary, there would be need for manure at some time to come. The loss may be made up by keeping an animal of some kind. The cultivators of St. Elizabeth had great difficulties but they had overcome much by rearing animals and by intelligent manuring. The grass problem here might be overcome by growing Guinea Grass among the bananas. It pays doubly by rearing animals when good use is made of the manure from them. In connection with minor crops, he said it was unwise to put all one's eggs in one basket. Banana is good but it should be supplemented by other crops as far as the small settler was concerned. By proper rotation a small plot could be made to yield a good deal and the money spent in buying less nutritious imported articles would be saved. A hearty vote of thanks was given to Mr. Gauntlett. The President in speaking about the working of the Port Maria People's Co-operative Loan Bank, said that many members had not paid up their subscriptions. He showed why this should be regularly done and encouraged share holders to try to settle up their arrears. Mr. McCalla encouraged members to read the JOURNALS which contain so much valuable information. Mr. S. A. McFarlane was appointed to distribute them when they are to hand. Mr. L. A. Gayle became a member and paid 1/-. After a few other matters were dealt with the meeting adjourned.

B. F. MCCALA, Secretary.

Maldon (St. James).—A meeting was held on 21st November, 1913. Members present:—Rev. R. G. Chambers in the Chair, Mr. S. C. Reid, Corresponding Secretary, Mr. J. W. Chisholm, Recording Secretary, and 18 other members. Minutes of last meeting were read and confirmed. Correspondence: A letter from Mr. Harrison, the Instructor, showing the reason of his absence, was read. The Concert in connection with the Society was discussed; it was fixed for the 29th December. The local show was again discussed and it was decided that matters be further arranged in the month of January to have it in March 1914. Mr. A. A. Robinson gave some valuable hints in the cultivation of canes and recommended J. 72 as a good variety. The time to hold the regular meeting was again changed to the first Friday in each month. Mr. A. A. Robinson moved that a syringe be bought by the Society to be used on horses, mules and cows which have ticks. This was seconded by Mr. J. W. Chisholm and agreed by all present. Subject for next meeting: "Canes and Bananas," which is more profitable. Two new members were elected. Some minor matters were dealt with and after the singing of the National Anthem. The meeting adjourned.

S. Cornelius Reid, Secretary.

Linstead, (St. Catherine).—The monthly meeting was held at Linstead on the 29th November. In the absence of the President, the Chair was occupied by Mr. A. M. Tucker, one of the Vice-Presidents. The following were present: Mr. Mossman, the Instructor; ten members and the Secretary, Mr. Jones became a member. The letter re the resolution of the Society in connection with the Co-operative Bank was submitted, but was not dealt with, as it was felt desirable that the President should be present when this subject is discussed. It was definitely stated that the Parent Society would not meet on the 16th of April next, so the date for our Show (16th April) was definitely decided on. The Secretary read a letter from the Secretary of the Parent Society re authorised persons that application must be made to the Secretary. Read letter from the General Secretary re Water Tables in the Parish of St. Catherine. This letter was written on the recommendation of the Clerk of Parochial Board of St. Catherine. The matter came in for a lengthy discussion. The following resolution was moved by the Chairman and carried "That the letter from the Clerk of St. Catherine Parochial Board re Water Tables is without foundation and rude, that it is the duty of the Parochial Board to look after the roads and water tables, and for this purpose the tax payers of the Parish are burdened from year to year, that the Society will recommend the suggestion contained in the letter when the Clerk of St. Catherine Parochial Board has satisfied them that he has begun "to show the spirit of co-operation by cleaning out those water tables" that are near his house. In connection with the coming Show, Mr. Mossman informed the meeting that the prize lists and placards have been forwarded by the printer, but he has not yet received them. On the suggestion of Mr. Tucker, the Agricultural Instructor will give an address on "vegetable gardens" at the next meeting.—W. C. Bennett, Secretary.

Bethel Town, (Westmoreland).—A meeting was held in the Court House on Saturday 22nd inst. The following members were present: Rev. P. Williams, President, Messrs. H. M. Virgo V. P., nineteen members, and the Secretary. Minutes of previous meeting were read and adopted. Matters growing out of the minutes were dealt with. The Secretary explained that he received one hundred cacao and grapefruit seedlings which he distributed among members of the Society and that another supply is expected, and to be dealt with in like manner. The Secretary also informed the meeting that according to instruction at last meeting, he wrote to the Inspector of Police requesting him to give the "Authorized Persons," a lecture, on the duty they are expected to perform, on his next visit to the Police Station. At this stage the following "Authorised" men; Messrs. R. W. Chambers, C. T. Barrett, Jas. Reid, O. G. Dove, P. Harriott informed the meeting that they attended a lecture at the Police Station on Thursday, 13th inst. and after listening to lecture, and receiving answers to questions that were put to the Inspector, they were of opinion that the law is at

is, is unworkable, practically no protection and no pay offered to "Authorized Persons" and that said law ought to be revised. These men refused to have any further connection with this service and tendered their resignations, promising also to hand in badge and handcuff to the Corporal here, and to get a receipt for same. The next item on the agenda was the lecture on "Mulching" by the Instructor, Mr. Briscoe, but he was not present, however, the members decided to have a talk on same, which proved to be very interesting; several members expressed their views on same; at the close, it was decided to have the lecture on this subject at our next meeting by the Instructor, and a discussion on sweet potatoes which is to be introduced by Mr. C. T. Barrett. The following resolution was brought by the Secretary which received the unanimous support of the meeting, and it was decided that a copy of same be forwarded to the Postmaster for Jamaica. "Whereas residents of this township and surrounding districts have had to suffer much inconvenience by delay of parcels at the Mont Pelier office, and sometimes the mails with important letters, (which in some cases might mean loss to the parties;) and whereas the reason given from time to time when such delays have occurred, is, that the mails are too heavy for the courier, which often necessitates additional expenses for conveyance. Be it resolved that the members of this Branch respectfully ask the Post Master for Jamaica, to do away with the present system of conveying letters and parcels to this office, and to substitute a cart for it. Mover: L. G. Baldie, Seconded, by R. B. Leslie. The Secretary was instructed to write to members who have not paid in their subscription for the current year to do so not later than next meeting. Meeting adjourned, *sine die*.

L. G. BALDIE, (Hon. Secretary).

Bunkers Hill, (Trelawny).—A meeting was held on the 20th November instead of the 13th which was a very rainy evening, at the usual hour. Present Mr. S. J. Wright in the chair and 12 other members. Minutes of last meeting read and confirmed. Matters arising from the minutes were dealt with. Members were urged to give in their subscriptions to the Show fund by next meeting. Secretary read letter from Parent Society in connection with the Prize Holding scheme. The Society's grind stone was the next item of discussion. On being asked, the Treasurer stated that the amount already brought in by the stone was 10s. approximately. It was agreed the gatherings from date be put aside to purchase a new one when the present one is used down. As a sign of appreciation, the Society agreed to free Mr. Bell of subscriptions for the keen interest he exhibits on behalf of the Society in the management of the stone. To satisfy himself and other members Mr. Vassal asked questions *re* the use of the Society's money in future. The Secretary tried his best to answer them satisfactorily. Letter from Mr. Main, tendering his resignation was read. Secretary was instructed to write an appreciative letter to the ex-President wishing him success in his new sphere and extending to him sympathy in his late bereavement. Correspondence re Prædial Larceny was read. This gave way to a long discussion on the subject. Secretary asked to write the Parent Society giving the opinion of the branch. Roll was called and meeting adjourned.

W. R. ROBOTHAM, Secretary.

East Portland, (Portland).—A meeting was held in the Manchioneal Schoolroom on the 22nd of November. The second Vice President, Mr. D. Fuller occupied the Chair. There were 20 members present as well as Mr. Wates and a few visitors. The minutes of the last regular and special meeting were read and confirmed. The Secretary read communications from the General Secretary. Mr. Wates read an article from the JOURNAL for March, 1912 on "Brains on Small Holdings." The article went to show that much has been and can be accomplished by paying great attention to trifles. For this a vote of thanks was tendered. It was decided that in future, regular meetings be held on the second Saturday in each month. At the next meeting to be held on the 13th of December Mr. McBean will lecture on the proper methods of reaping and preparing crops for market.—ERNEST R. WALLACE, Secretary.

Central St. Andrew. (St. Andrew).—The subject of Prædial Larceny was discussed at a meeting of our Branch held on the 19th November, 1913 and the following suggestions were unanimously agreed to:—That thieves caught in the act of stealing growing crops should be shot, for personal defence, as the thieves are generally well armed and would not scruple to take the life of the owner. We endorse the action of the jury that liberated the Chinaman, who shot the thief in his shop in St. Mary; also the action of the jury that liberated the cultivator who shot the thief in his field in St. Ann. 2. Give Authorized Persons regular and prompt payment without much trouble as at present, and they will do better work. 3. Establish "buying centres" as a means of helping to detect prædial thieves. 4. Thieves should be flogged in and out of prison. This would act as a deterrent as in the case of obeahism. 5. Enforcement of the Vagrancy Law in the country districts as well as in the towns and that the Government provide penal settlements for vagrants as planters in general would not feel disposed to trust them for employment as labourers. 6 Short term prisoners should be made to work on the roads. 7. Appointment of Rural Headmen as formerly. Better payment of District Constables. 8 That provision be made in the Law to deal with persons buying stolen crops. The present Law allowing the purchasing of cacoa in the pod should be abolished as it helps to encourage the prædial thief and even acts as a great temptation for children to become prædial thieves. 9. That the books of produce buyers be open at any time to Authorized Persons, the Police, and Planters, for the purposes of tracing stolen crops.—A. O, AITCHESON, Secretary.

Cedar Valley. (St. Catherine).—The regular meeting was held on the evening of the 25th Nov. The turn out was not as large as anticipated. Doubtless the inclement weather accounted for the smallness of attendance. This was the meeting arranged for, to discuss the question of Prædial Larceny and despite the attendance, most lively and interesting discussions followed the reading and confirmation of the minutes. Flogging—Everyone present agreed that the class, repeatedly convicted of prædial larceny belongs to the shameless section of our community, and flogging would have very little or no effect upon these convicts. A strict Vagrance Law, would, the members declare, help materially in ridding honest, hardworking small settlers of the heartless rogues around them. Youths under sixteeen years of age, may be indentured with, ministers, schoolmasters and other gentlemen, who may show a willingness to take them. Short term prisoners should be kept to work on the Parochial roads chiefly in the districts to which they belong. Rural Headmen should take the place of District Constables. It is the general opinion that these men will be such as will seek to remedy, to a great extent, many of the existing evils. Persons guilty of first offence should be dealt with under first offenders law. Persons guilty of second offence should receive a period of imprisonment, not exceeding 30 days, and to work on the Parochial roads. Persons guilty of the 3rd offence should be put in *stocks* on market days, and work on Parochial roads on other days. Persons guilty of the 4th offence should be sent to the penal settlement. This brought the discussions to a close and after the singing of the National Anthem. The meeting adjourned.—J. A. CLARKE, Secretary.

Retreat, (St. Mary).—The regular monthly meeting was held in the school room here on Thursday the 27th inst. commencing at 7 p.m., Present: Messrs J. C. Sharpe, Vice President and Treasurer, Thomas Lobban 2nd Vice President, thirteen members and the Secretary. The President (Mr. E. Mais) being absent, the chair was taken by Mr. J. C. Sharpe. Letter from the Parent Society *re* "prædial larceny"—and best methods to deal with prædial thieves, dealt with, and a report on the matter will be sent to the Parent Society. The questions contained therein were discussed at length. Messrs. Cradwick and Rigg judges of the competition *re* best provision fields submitted their report, which was received with cheers. Four competitors, viz.: Messrs. David Richards, Jeremiah Russell, John Murray and Frederick Solomon. Prizes awarded thus:—1st prize 20s. to Mr. J. Russell, 2nd 10s. to Mr. F. Solomon, 3rd 5s. to Mr. D. Richards, there being three prizes. The judges awarded 5s. to Mr. John Murray,

These prizes (three) were offered by Mr. E. Mais the President. After the distribution of the prizes Mr. S. J. Brown, moved the following resolution seconded by Mr. D. Lawrence and carried—Resolved: "That this meeting desire to put on record its full appreciation of the Presidents generosity in awarding prizes for best cultivated fields for 1913, and trust and hope that before long his interest in the society will bear the fruit we all wait for." Many warm words of gratitude were spoken in favour of the President's generosity. The Net proceeds of society's concert, on the 20th inst. dealt with. It was moved and carried that the Secretary receive 40s. and 25s. 4½d. be placed in the hands of the Treasurer. Other minor matters affecting the welfare of the society were dealt with. After the closing address by Mr. Sharpe. The National Anthem was sung and the meeting adjourned.—D. LAWRENCE, Secretary.

Warsop. (Trelawny).—A meeting, as was previously arranged, a month ago, was held in the Baptist Schoolroom, on the 26th Nov., 1913, at 7 p.m. There was a good turn out of members. The minutes of the previous meeting were read and confirmed. Arising out of the minutes, was the question of a list of members who have paid in their subscription, being submitted. Four new members were then added to the list. Then followed the business of electing officers for this Society. It was moved by Mr. Woodfin seconded by Mr. Walters that the Rev. E. C. Hughington be elected as president, this was unanimously agreed to. It was moved, seconded, and unanimously carried that Messrs. S. N. Brissett, and A. A. Woodfin be appointed first and second Vice presidents, respectively, Mr. U. K. Walters be permanent Secretary, and Mrs. F. N. Brissett be Treasurer of this Society. It was moved by Mr. Woodfin and seconded by Mr. Grey that the Secretary send in the Affiliation Fee to the Parent Society. It was generally agreed to that the monthly meeting in future be held on the first Friday of every month beginning at 4 p.m. Mr. Arnett (The Instructor), who was then with us spoke at length on the value of the Prize Holding Competition. After much discussion it was moved that the meeting be adjourned and the next meeting was fixed for Friday 5th December, 1913. After the singing of the National Anthem the meeting was brought to a close.

U. K. WALTERS, Secretary

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